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with which is combined Operation & Maintenance

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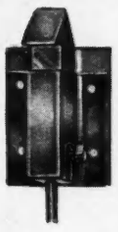


STREAMLINING jobs like this—giving them that "dash of class"—that extra eye appeal—becomes much more simplified when they are equipped with Hansen Hardware.

Although scarcely visible on a job like this, yet the "right" hardware is important. For instance, the rear door opens easily, slams shut and is rattle-proof. It's fitted with Hansen No. 124 Slam-and-Take-up Lock.

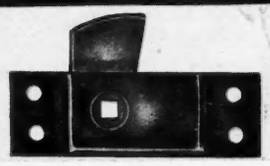
Other typical Hansen equipment on such jobs includes the Sliding Door Hanger, Sliding Door Lock and Tool Box Lock shown. All doing teamwork that insures REGULAR as well as SPECIAL delivery.

A. L. HANSEN MANUFACTURING CO.

5047 Ravenswood Ave.

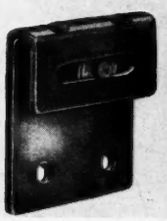
CHICAGO, ILL.

No. 124 Lock. Slams. Takes up. Double-angle striker bolt keeps doors tight shut.



No. 46 Tool Box Lock. Attaches inside of tool box or door on which applied.

Ask for CATALOG



No. 24 Sliding Door Hanger. Suspends doors inside or outside of body.

No. 45 Sliding Door Lock. Locks in open or closed position.

HANSEN HARDWARE for Commercial Bodies

HANSEN

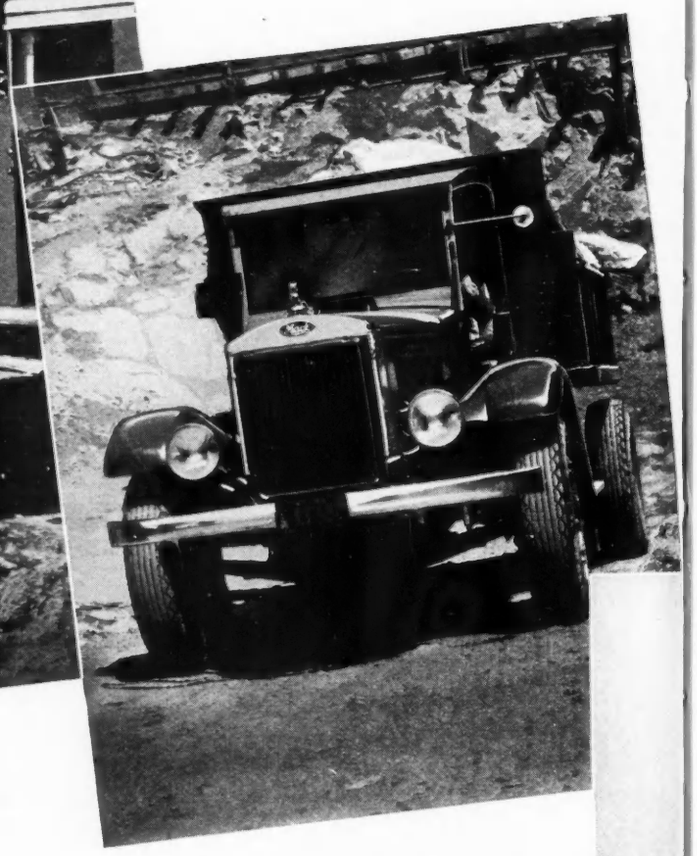
THE HARDWARE FOR HARD WEAR

COMMERCIAL CAR JOURNAL. Vol. LVI, No. 4. Published monthly by Chilton Co., N. W. Cor. Chestnut & 56th Sts., Philadelphia, Pa. Subscription price: United States and Possessions, Latin American Countries, $3.00 per year; Canada and Foreign, $4.00 per year. Single copies 40¢, except April Issue, $1.00. Acceptance under the Act of June 5, 1934, authorized December 18, 1934.

ROAD CONTRACTOR

as a

Bucyrus-Erie Shovel and Le Tourneau Grader on a Sheppard job in Illinois. Both are Texaco lubricated.



W. J. Sheppard's Mack Trucks use Texaco Fire-Chief Gasoline and Texaco Motor Oil to keep them fit for rough, tough service.

Texaco Dealers invite you to tune in The Texaco Star Theatre—a full hour of all-star entertainment — Every Wednesday Night—Columbia Network—9:00 E.S.T., 8:00 C.S.T., 7:00 M.S.T., 6:00 P.S.T.

TEXACO

COMMERCIAL CAR JOURNAL

VOL. LVI, NO. 4 DECEMBER, 1938

EARS To the Ground

Show Scholars

You can well imagine that this department can tolerate no laggards at this season when the Truck Show and the Automobile Show are on. The top sergeant measures the initiative of operatives by the number of advance tid-bits turned in and devotion to duty by the size of the bunions which operatives contract in tramping show aisles and hotel corridors. One of the first and therefore the most painless item to be turned in was a report that a manufacturer has a line of horns that will blow only when a vehicle is in motion. This department votes for immediate availability.

Plastic Packet

A well-known chief engineer hazarded the opinion that the increase in the use of plastics was due purely to increased ornamentation and that they served no useful purpose. This being the case the C.E. thought that plastics would cut no ice in the truck industry.

Converter Continuation

A truck manufacturer who for years has been experimenting with a fuel oil converter for gasoline engines was heard to whisper that just a few months more would be required to finish up work on a new device. He mentions a 3 per cent power loss as the maximum penalty for using the lower cost fuel.

Engine Ejaculation

A large-engine builder will soon announce a line of diesel and gasoline engines of the horizontal opposed type. Our man expects that they will be 6-cylinder engines of around 250 to 300 cu. in. displacement.

Mack Make-Up

Now that Mack has placed its own make diesel engine using the Lanova type combustion chamber in trucks the company has made arrangements with Buda to supply smaller engines of the same type for the lower capacity Macks.

Oil Oath

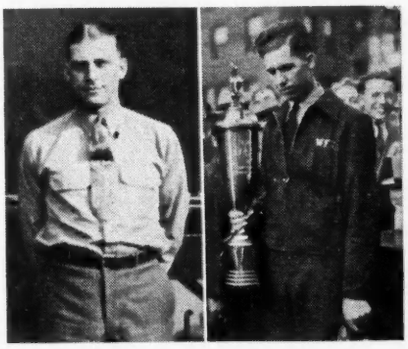
Last month the magazine which is the parent of this department contained a description of a 1000 cu. in. and a 1200 cu. in. spark ignited fuel oil engine. They seemed awfully large at the time for trucks but at this early date one of our scouts has learned that three different trucks are in the process of being built with these engines incorporated.

Foreign Footnote

To our shores from abroad come details of a tire patent application. With surprise oozing from every pore we note that two layers of steel cable are used instead of rayon or cotton.

Passenger Car Probability

Enough reports from different sources have reached us to make this note a certainty but with our usual caution we list as a probability the announcement of a full-size, low-priced, four-cylinder passenger car by an old established manufacturer by the turn of the year.



1938 ATA Rodeo champion was Edson Smith of Guardian Transit Co., left, who won the Evans trophy. Runner-up W. F. Steed, Georgia Highway Express took the Freuhauf award

Tank Topic

When this department came across a design for a 4000 gal. tank for a frameless semi-trailer which the designer says will cut over 7 ft. from the length and lower the center of gravity by 12 in. and at the same time result in a lighter tank you can well understand that we were left breathless. We'll remain breathless until we can get you more details.

Diesel Data

In a single turn around the aisles of the truck show evidence was presented from two sources which proves the imminence of a new 4-cycle, 6-cylinder diesel engine of 377 cu. in. piston displacement. It will come from an established diesel engine builder.

Economy Edition

The Hoof Products Co. reports on an economy device to be used on governed Fords and Chevrolets too late to be described in this issue, but the magazine has made promises to this department for the next issue.

Ring Rhyme

Expander type piston rings have made that long threatened invasion of standard equipment in a large way. Both the 1939 Ford and Mercury are using inner rings under the second compression ring and under the oil ring. This department has been predicting this move off and on for a long time.

Race Ratification

According to plans now laid a race car will greet the starter's flag at Indianapolis next May equipped with dual front wheels. The wheels will be of the differential type now being used as equipment on trailer axles. The purpose will be to demonstrate the ability of the wheels on a steering axle. The wheels will be without camber or caster. Carrying this thought through dual wheels on trucks would mean increased weight on front ends resulting in better load distribution.

1. Robert F. Black, president of White company, knows a good profile when he sees it and motions photographer to snap F. H. Staniford, head of Mack, as Harvey Fruehauf, of Fruehauf, looks on

2. Snapped chatting at the truck show dinner are (l. to r.) W. F. Rockwell, head of Timken axle, Irving Babcock, president of General Motors Truck, and Joe Burke, sales chief, Dodge truck division

3. J. F. Winchester (left), National Truck Show president, greeting Vincent Bendix, as R. L. Morrison, sales manager of Bendix-Westinghouse, introduces them

4. C. A. Tilt, president of Diamond T, at the show, standing between Dugan Senior and Dugan Junior of the Dugan Bakeries

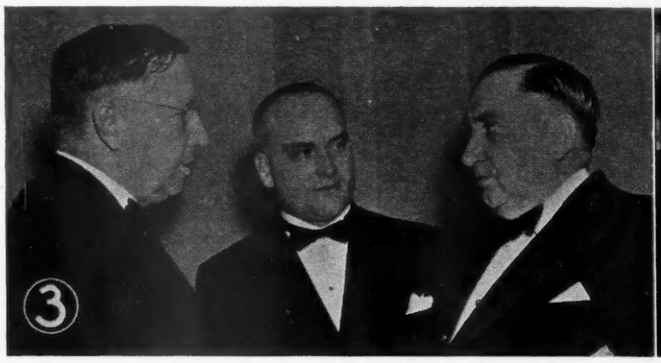
5. Julius Heil, Wisconsin governor-elect, who panicked diners with election tales

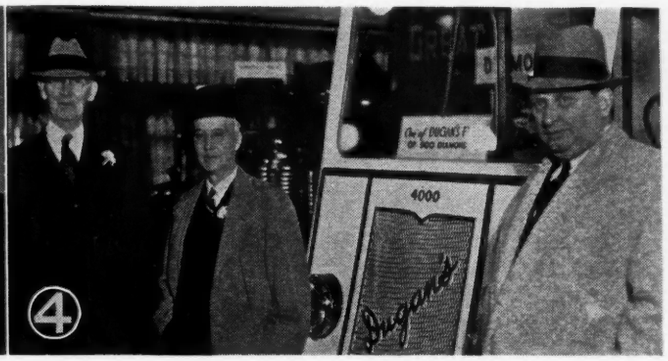
6. Silver-haired Gar Wood with Major E. H. Crawford, British truck group manager

7 to 12. Views of exhibits at the show

National TRUCK SHOW

. . . is greatest exhibition ever staged by the motor truck industry, but 25,000 attendance is disappointing, although admittedly quality. News report of exhibits





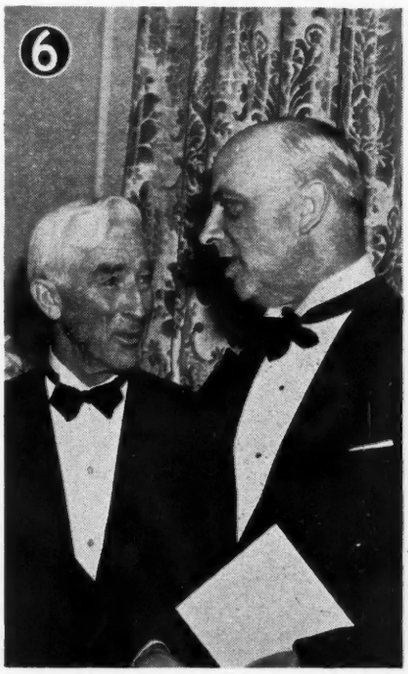
THE best show the truck industry has ever staged got under way slowly on Armistice Day. Commerce Hall in the Port of New York Authority Building was beautifully decorated, featuring the contest photographs of transportation subjects as a motif. Exhibitors spent a great deal of money to provide handsome displays and convincing demonstrations of their wares.

Attendance totals were disappointing. Some 25,000 people entered the show during the week. Apparently the long week-end held down the early attendance which built up to more gratifying proportions during the latter days of the show. Most exhibitors agreed that the attendance was a quality group representing real purchasing power.

Among the exhibits were trucks and equipment that have had no public announcement up to this time. International Harvester Co. had in its booth a DRB-70 model which has a gross rating of 24,400 lb. The unit is powered by a 6-cylinder, 672-cu. in. Cummins diesel engine. It is representative of a line of six 4-wheel models with a range of gross vehicle ratings of from 17,200 lb. to 38,000 lb., and six 6-wheel models with ratings from 24,000 lb. to 62,000 lb. All are powered with the same engine as the one exhibited or with a four-cylinder Cummins engine having 448-cu. in. displacement.

Studebaker has re-styled the 1939 model coupe express. It has acquired the lines and styling of the 1939 Commander passenger car, retaining passenger car comfort without sacrifice of its utility features. There are no major changes in other models. The styling, service accessibility and performance of the K series will be continued. Both conventional trucks and cab-forward models will be con-

(TURN TO PAGE 72, PLEASE)



1. Annual meeting of A.T.A. board

2. Chester H. Gray, director, National Highway Users Conference, at the "mike" urging the industry to guard its independence by opposing destructive monopoly which would result from government coordination of all forms of transportation

3. Studebaker's Paul G. Hoffman tells how accidents were reduced from 17.4 per 100 million vehicle miles in 1935 to 12 so far in 1938

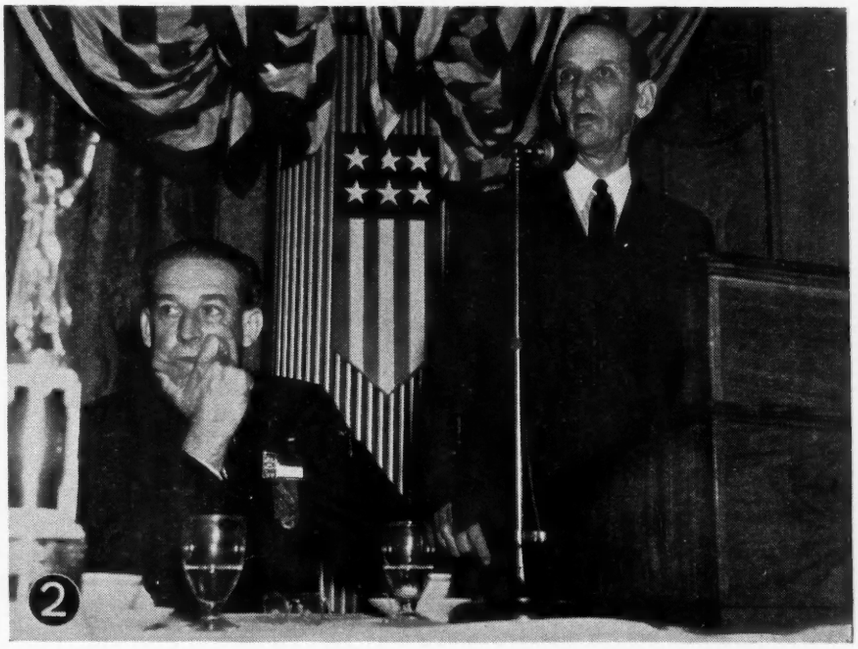
4. Comely Mrs. Marjorie White, manager, Indiana Film Transit Co., joyfully accepts an ATA safety plaque from ICC's Blanning for an enviable safety record with 12 trucks

5. The Executive Committee. For identies see end of the article

"MUTINY" IN THE RANKS

American Trucking Association convention checks growing "class warfare" among common carrier, contract carrier and local cartage groups. Report of the convention

By GEORGE T. HOOK
Editor, Commercial Car Journal



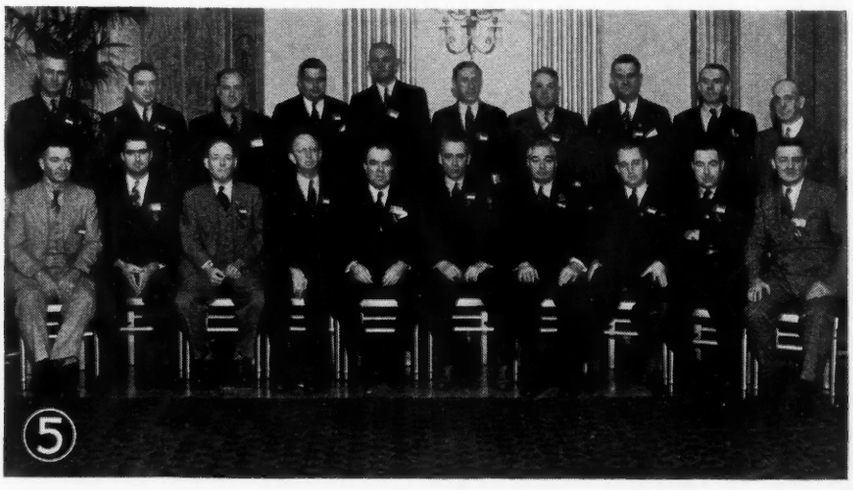
"MUTINY," arising from growing "class warfare" and the feeling among local cartage and contract carriers that the national organization is dominated by common carriers, reared its somewhat good-natured head at the fifth annual convention of the American Trucking Associations, Inc., at Detroit, last month. The convention was attended by 2000 members of the industry from all parts of the nation.

The "mutiny" took the form of a desire on the part of contract carriers and certain local cartage groups to form national organizations of their own. In order that this might be accomplished on an amicable basis, the Contract Carrier Division of the A.T.A. formally petitioned the Board of Directors that the by-laws of the A.T.A. be amended to permit natural classifications of carriers to form national organizations and to affiliate such national groups with the American Trucking Associations, Inc.

The by-laws as they stand permit only the affiliation of state and local groups.

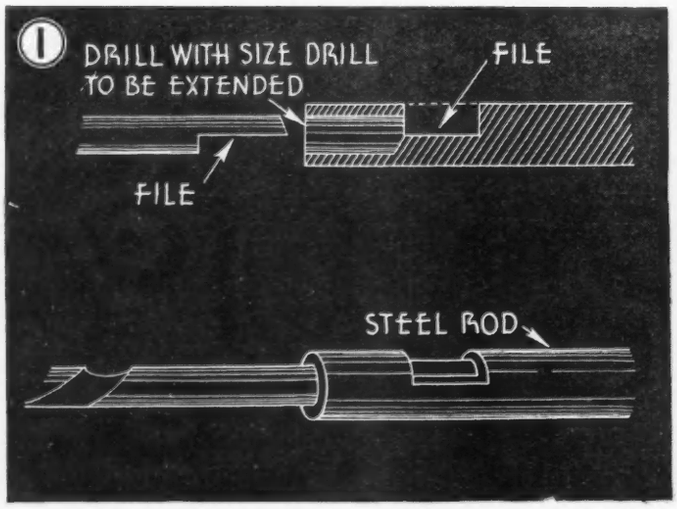
The amendment proposed by the Contract Carrier Division was debated at length by the Policy Committee. A strong sentiment prevailed that the amendment, if approved, would have a tendency to disrupt state associations and foment cleavage along national lines. Although the amendment never came to a vote it is safe to say that the Policy Committee represented a general feeling that unity of the entire industry could best be preserved and the interests of each group of carriers best be served under the banner of one national organization—the A.T.A.; that it would be better to retain the present policy whereby natural classifications of operators are permitted to form their own divisions within the A.T.A. in order to protect their own interests should they be threatened.

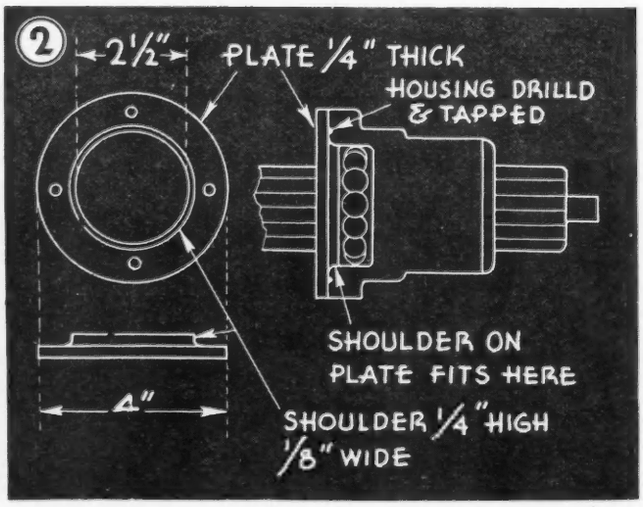
(Turn to Page 60, Please)



SHOP HINTS *from Fleet Shops*

Commercial Car Journal Will Pay 5 Dollars for Each Shop Hint Accepted. Ideas





1. Drill Extension

By Leonard Linde
Drexel Hill, Pa.

When it becomes necessary to use an extension on a drill the situation can be met very easily by taking a piece of steel rod of the required length and drilling it to a depth of about ½ in. so that the drill to be used can be entered. At the end of the drilling file a slot as illustrated exactly halfway through the steel rod. Then take the twist drill that you are going to use and file the shank exactly half way through, the filing to be the same length as the slot. Then when the drill is inserted in the steel rod the hole serves as a guide and the two mating half rounds make a joint that will transmit power.

2. Bearing Retainer

By J. W. Kyle
Kraft-Phenix Cheese Corp.
Oakland, Cal.

We were having considerable trouble with the transmission main shaft rear bearing lock ring jumping out of place on some of our KCL Dodge trucks. After trying numerous ideas we machined a plate with a shoulder that fitted against the bearing in place of the lock ring. The bearing housing was drilled and taped for four ¼ in. capscrews to hold the plate in place. This eliminated the trouble completely.

3. Bolt Holding Tool

By Frank Coloumb
Emsco Concrete Cutting Corp.
Los Angeles, Cal.

In many cases it is hard to hold the round head of a carriage bolt when removing the nut. This is especially true when the bolts have been in for a long time. Bolts of this kind are found in fenders and bodies. To hold the bolt while the nut is being removed we have made a tool which is nothing but an L shaped piece of iron. The end of the base of the L is round and it is filed to a sharp cross to hold the head of the bolt. A chain and hook and notches along the long side of the L to hold the tool in place while working completes the equipment.

4. Valve Oiler

By Frank Kohlberger
Mack-International Motor Truck Co.
Long Island City, N. Y.

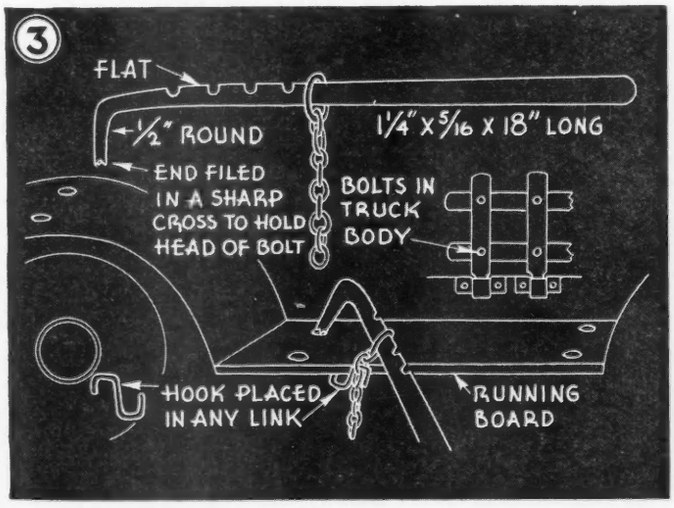
The illustration shows a solution for getting at sticky valves so that a stream of lubricant goes directly on to the valve stem. This method is much more accurate than the hit or miss method of pouring oil through the spark plug hole and hoping it seeps down the valve stem. There is of course no material cost worth mentioning.

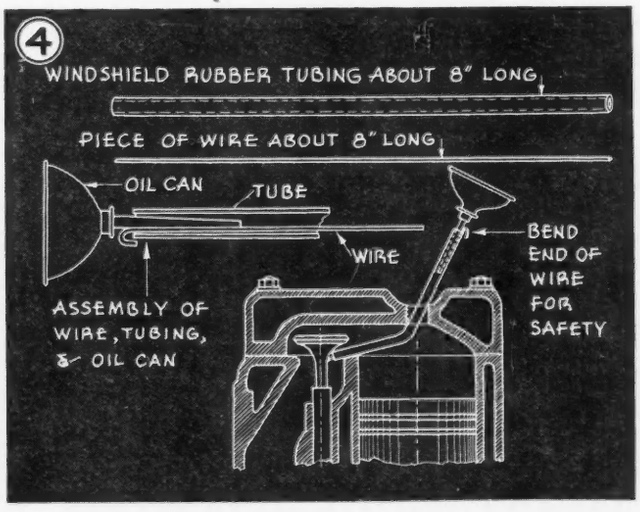
Electrical Ground

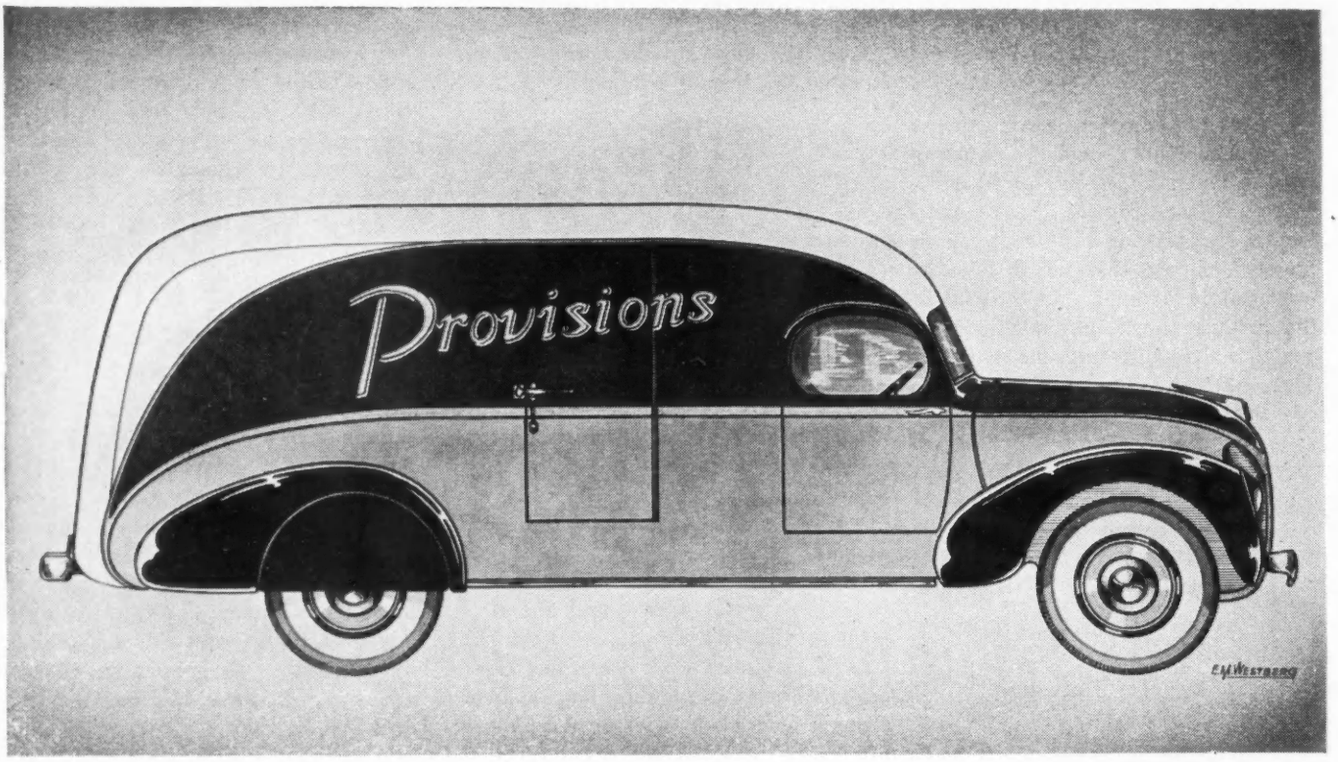
By C. A. Budd
National Refining Co., Kansas City, Mo.

The tanks on our tank trucks are mounted on wood sills and we have lights mounted on the tanks. If we ground the tanks with a wire it breaks off in a surprisingly short time due to vibration. If we use a terminal to prevent this the wire usually gets pulled off with a washing scrub brush. Accumulation of ice and snow does not increase the life of a ground wire. To get around this we use a spring about 3 in. long and about ½ in. in diameter. We simply hook each end in a hole making sure that there is tension on the spring. If the spring is too short we make an extension of welding rod and put a hook on each end. The tension of the spring keeps the rust worn off at the point of contact. We have never had a failure in three years of using springs.

Count . . . No Matter How Roughly Sketched . . . We Will Polish Them for Publication


3
FLAT
½" ROUND
END FILED IN A SHARP CROSS TO HOLD HEAD OF BOLT
1¼" X 5/16 X 18" LONG
BOLTS IN TRUCK BODY
HOOK PLACED IN ANY LINK
RUNNING BOARD





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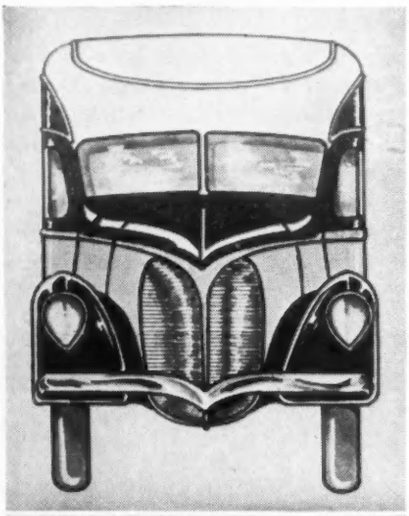
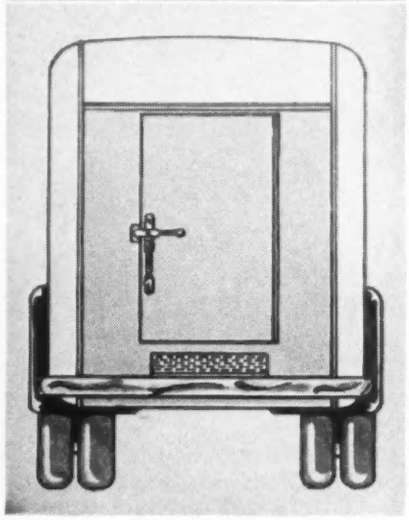
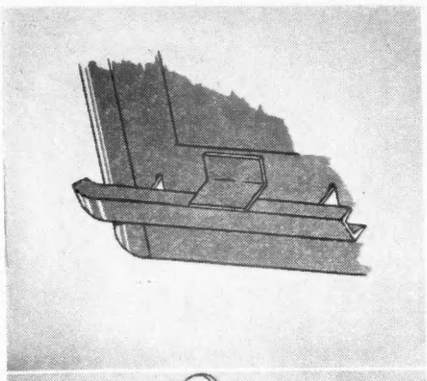
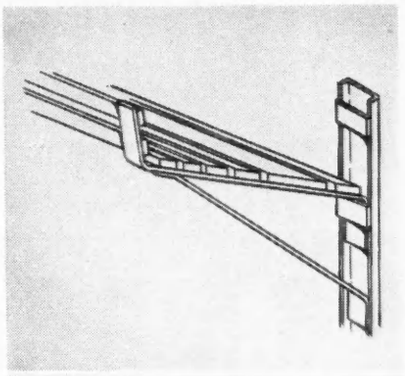
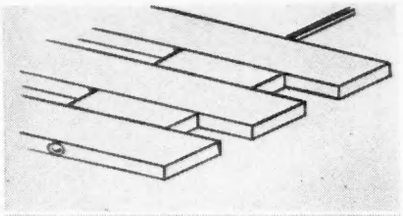
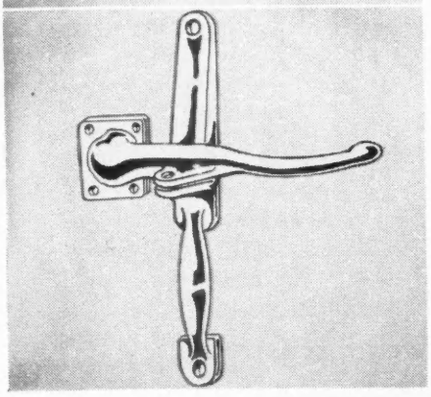
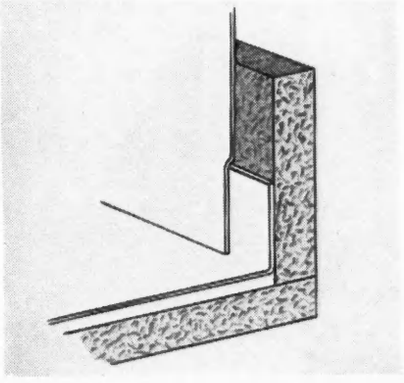
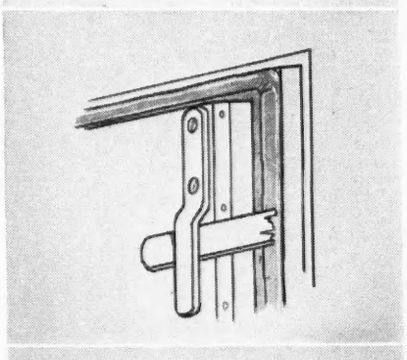
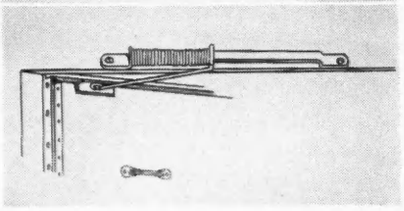




THE BODY OF-THE-MONTH

Here is the third in Commercial Car Journal's series of original body designs. As pointed out previously, the designer has worked in body shops and knows the practical problems of building truck bodies. Fleetmen are reminded that all designs are copyrighted but that arrangements can be made with the designer for procuring complete construction drawings and specifications by addressing The Editor, Commercial Car Journal, Philadelphia, Pa. Next month—a body for the Ice Cream field.

PREPARED AND COPYRIGHT 1938, BY E. M. WESTBERG, BODY DESIGNER

VOCATIONAL USES

This month's design is a high temperature refrigerated body. This unit is well adapted to the delivery of meats, provisions, cheese products, mushrooms and other perishables.

The dimensions of the body as illustrated are 120 in. long by 60 in. wide by 52 in. high. These are all inside dimensions and give approximately 217 cu. ft. of loading space and approximately 60 sq. ft. of shelf area. There are two rows of shelves, 18 in. in width, all around the body except where doors occur.

DESIGN FEATURES

The design is readily adaptable to three types of refrigeration so that the operator can select the type best suited to and most economical in his locality. The three types of refrigeration are an aluminum conductor ceiling plate with either an inside or roof-loading hatch for dry-ice, hold-over type refrigeration plates or either water ice or dry-ice forced-draft bunkers.

BODY MATERIALS

The most economical materials of construction over a long period of operation are suggested. Briefly the specifications are as follows: All-steel framing, steel roof laid over formed steel roof carlines. Understructure of formed steel or structural channel iron. Outside panels of ¼-in. plymetl and inside lining of galvanized steel.

COLOR SCHEME

The effectiveness of the proper painting layout is well illustrated in this design. By using the dark colored streamlined field this body of fairly simple lines takes on an ultra-streamlined appearance and is reduced visibly in size. Thus proper painting accomplishes two things.

ILLUSTRATIONS

Illustrated are external views and several small but important features which bear mentioning and go a long way to completing a well-rounded design.

Opposite page—Side, front and rear views of the body.

Above left—The diamondette step on a channel type bumper is more useful and cheaper than the chrome-plated spring type bumper. Below it is the chrome door handle which gives trim and de luxe appearance to the finished unit.

Above center—Removable shelving is desirable to make cleaning more convenient and thorough. The shelves are also adjustable in height to accommodate various sized packages. Below it—The cork floor insulation runs up the side of the body approximately 6 in. as shown. This improves the structure at this point and gives 100 per cent insulation at the bottom corners. This would be hard to accomplish with the regular insulation as specified.

Above right — Specially designed floor racks. Below this—A stepped type rubber gasketed door to improve the efficiency of the refrigeration. On this same detail is shown the chrome-plated, piano-type door hinge and the top catch of the three-point door lock. The three-point lock consists of a catch at the handle outside and a catch at the top and bottom of the door on the inside. Below it—A spring door catch.

ECONOMY POINTERS

The economy of this unit is in its materials of construction which assure a unit that will give a long period of useful service. It is for this reason that suggestions of ways to build this job cheaper are omitted.

WE TOOK DRIVERS

FINGERPRINTS

. . . and 10 per cent failed to report for work next morning, safety chief tells safety congress where fleetmen discuss . . .

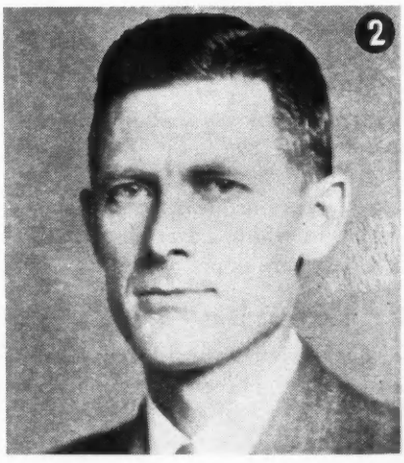
1. How to organize for handling accidents;

2. What good are accident records, with an ensuing lively debate on driver fatigue and off-duty use of company cars;

3. What to do with the accident repeater—which is where the fingerprinting came in;

4. Supervision of drivers away from the home terminal, and

5. Needed improvements in vehicle design and construction, and worthwhile accessories for safety.



By RANDALL R. HOWARD
CCJ Special Correspondent

LIVELY floor discussions of practical problems in the control of motor vehicle accidents featured the annual convention of the Commercial Vehicle Section of the National Safety Council, held from October 11 to 14 at Chicago and attended by several hundred executives of commercial fleets from all parts of the United States.

Discussions included organizing to handle accidents, accident records, accident repeaters, "courts of inquiry", road supervising of drivers, equipment maintenance, and a panel discussion on needed improvements in vehicle design and construction, and worthwhile accessories for safety.

W. F. Brown safety engineer of Consolidated Edison Company, New York City, in discussing "how to organize for the handling of vehicle accidents", stated that his analysis of recent company accidents had indicated that the "hidden costs" of these accidents was about 10 times greater than their reportable cost in damage and repair. These extra costs had included investigations and reports, travel, departmental overhead, rent, etc.; but no estimate of "loss of company goodwill".

Their records show four different persons responsible for 93 per cent of their accidents—the company driver, the other driver, and a third driver or pedestrian. About 90 per cent of their accidents are caused by the following nine operating faults: Passing moving vehicles too closely; following too closely; travelling too fast for conditions; careless backing; failure to grant right of way; cutting in or sudden turning out; inattentive driving; and violating traffic regulations. The other 10 per cent are chargeable mostly to defective equipment, improper loading and pedestrians.

They have road patrol for their 4200 drivers, calling them in for both good and bad driving reports. All drivers must attend their semi-annual training classes of one hour each. This includes all company officials "from the President down", since the drivers "hired for their brains", such as superintendent and salesmen, have twice as many accidents as those "hired for their brawn".

An important feature of their work is the use of 12 outfits of photographic equipment costing about $100 each, kept at different branches for taking pictures at the scenes of accidents and for moving pictures. These company-made films prove

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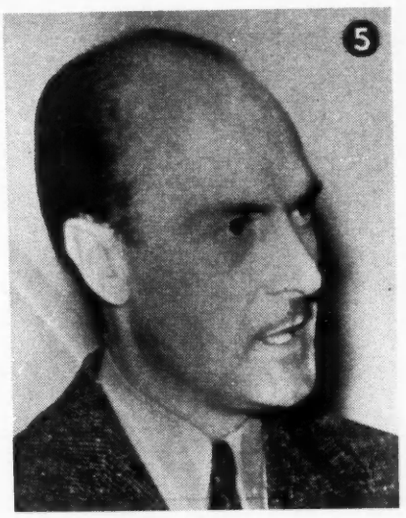
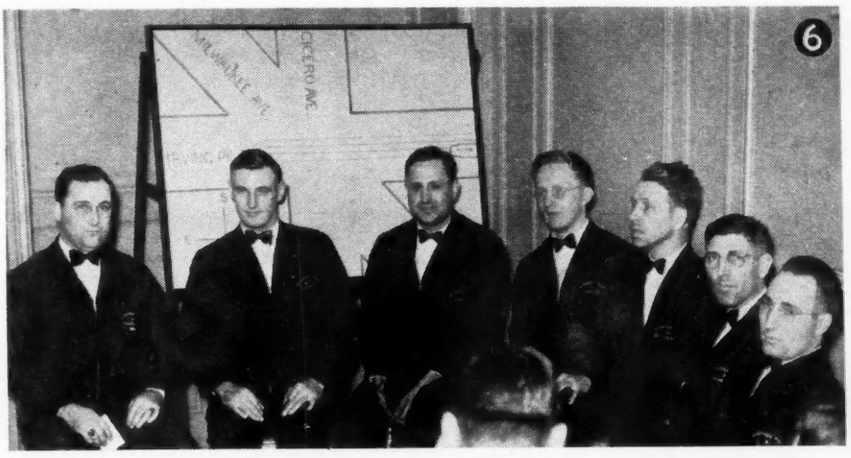




All photographs furnished through the courtesy of National Safety Council

1. Bryant Skeen, safety and personnel director of Pacific Freight Lines, Los Angeles, Cal., who talked about repeaters and brought up the fingerprinting.

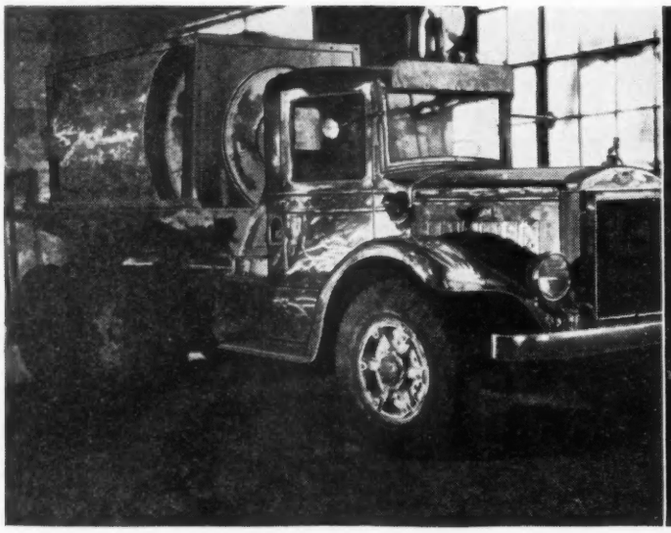
2. W. F. Brown, automotive engineer, Consolidated Edison Co. of New York, who told fleetmen how to organize properly for the handling of vehicle accidents.

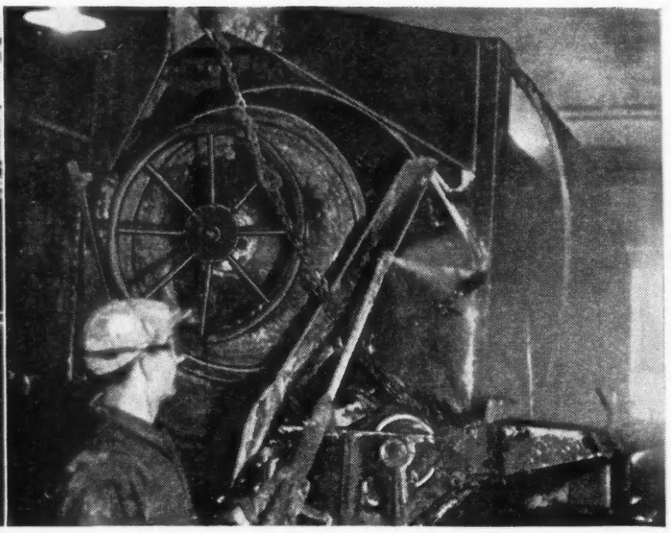
3. T. B. Johnson, manager of delivery division, Marshall Field & Co., Chicago, who staged a traffic court, and was elected Commercial Vehicle Section chairman.

4. R. C. Haven (left), safety engineer, Continental Baking Co., New York, presents trophy to Morris Cohen, Schulze Baking Co., Peoria, Ill., first place winner in the large fleet bakeries division.

5. H. H. Kelly, chief, Section of Safety, I.C.C. Bureau of Motor Carriers, discussed truck safety at home and abroad.

6. Marshall Field drivers who participated in the traffic court demonstration.





SHAPE THE SHOP TO BUSINESS CURVES

Building booms come by years, so during peak periods this fleet keeps its specialized trucks rolling with unit replacements, then uses leaner years to reduce inventory and wear out old equipment

By HENRY JENNINGS

Technical Editor, Commercial Car Journal

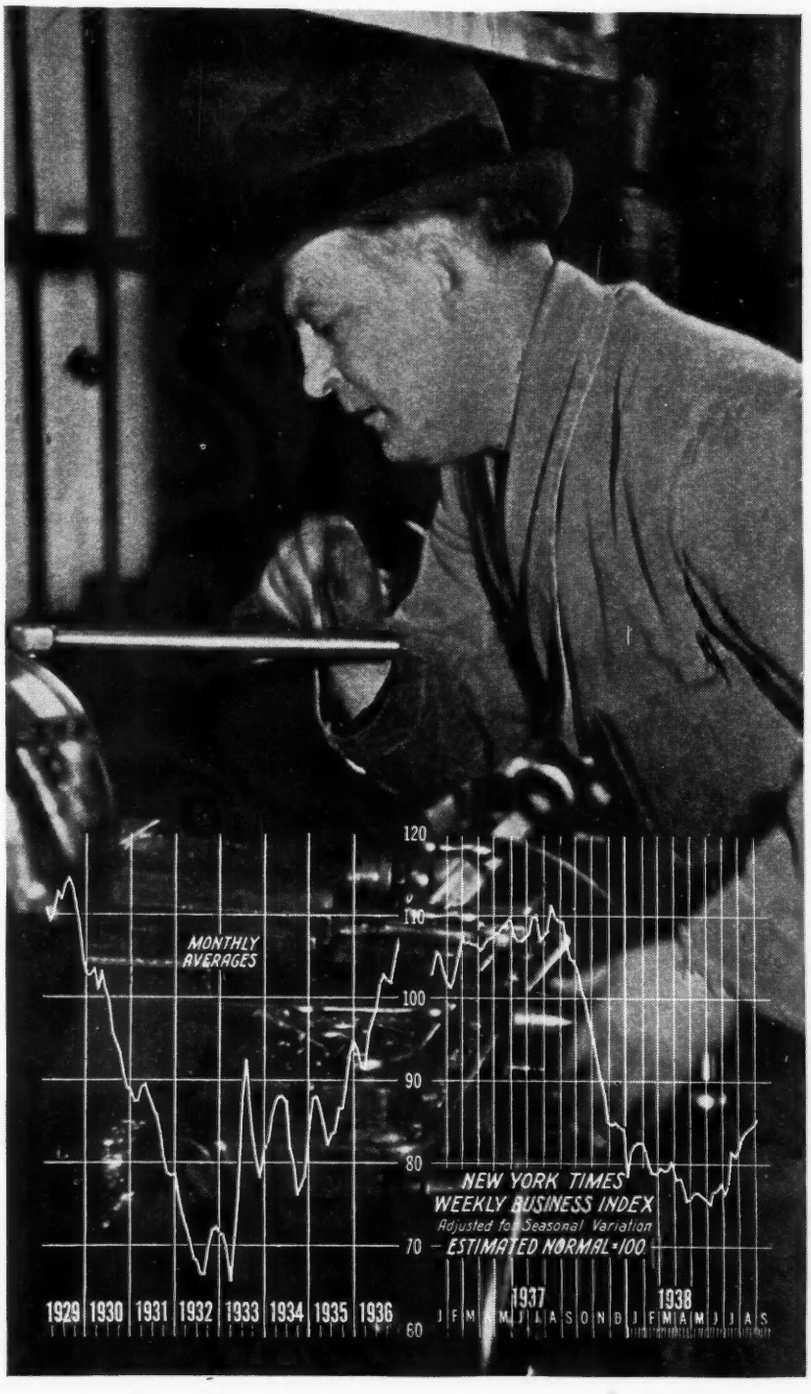
ON our first attempt to find Preston Smithers, who directs the fleet activities of the Warner Company, we located him deep in the shop at a lathe. He was turning dowels on the end of capscrews and cutting them off after having drilled the heads horizontally so that they could be locked with wire.

Mr. Smithers looked up from his work long enough to express his opinion of a manufacturer who pays so little attention to detail that he winds up with a hand brake assembly held together with a headless slotted machine screw with no provision for locking. The result is that when a driver really needs his hand brake he finds it in his hand innocent of any useful connection with the truck. We originally thought that we might modify this opinion somewhat and give it here but on second thought we decided that every fleet operator would know about what it is anyhow.

On our second attempt to find Mr. Smithers we saved time by what we learned on the first. We went straight to the same lathe where we found him turning out undersize bushings to fit transmission shifter shafts which had already been salvaged by turning. By this time we knew the way from the front gate to the lathe very well, and the next time we found him turning washers with various depths of countersink to act as spacers for the nuts that hold radius rod ends tight on the taper pin. After a few tightenings the nuts are up against the tapers and will not tighten any more. If countersunk washers are inserted so that the well will clear the taper portion, the ends can be tightened with ample room left on the threads to engage the cotter pin in the castellated nut.

And then one day we made our way to the lathe and Mr. Smithers was not there. He was in the office and he had time to discuss his fleet. We asked him to expand upon his idea of lack of attention to detail by manufacturers of trucks. He immediately outlined a design where the

Extreme left: To make paint stick better, all pressed steel panels are "roughed up" with an air operated wire brush. Next: Steam "guns" make stripping compounds more effective. Left: Set concrete doesn't wash off. Spillage that escapes immediate hosing must be chipped off with the air hammer. Below: Fleet superintendent Preston Smithers at his lathe.



engine with a three-point mounting gave a nearly floating arrangement. The clutch pedal bracket was mounted on the frame. When the frame wove as a result of traversing uneven ground or negotiating ramps the clutch would automatically be thrown out, a feature that did not appeal either to the drivers or the maintenance department. Then Mr. Smithers proceeded to square accounts with the manufacturers by outlining some of the major improvements that have been built into trucks in recent years and would say no more about the troublesome details that always get in an operator's hair.

The next step was a tour of the operation conducted by Mr. Smithers. The cement and building supplies business it appears is subject to no more violent business fluctuations than, say, a department store, only the hills and valleys are measured in years rather than in months. Our visit was made when the building boom was absent and consequently the fleet was only on partial operation, the active part being about 70 trucks. There was a scattering of dry goods material trucks (sand, gravel, etc.) but the bulk of the fleet was wet material trucks (those that agitate concrete in transit).

When the company gets an order for a batch of concrete a note giving quantity and specifications goes through a pneumatic tube to the elevated mixing hoppers in the yard. A truck moves up and the driver

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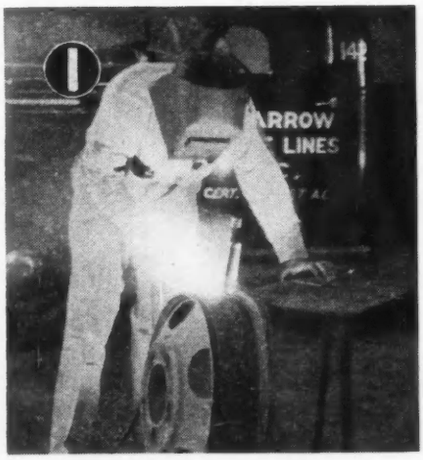
THE Wizardry OF WELDING

Snapshots chosen at random from fleet shops show the versatility of welders in repairing and salvaging of motor trucks and designing of equipment

WELDING seems to be gaining momentum as a fleet maintenance process. Its usefulness is bounded only by the ingenuity of the operator. Skill in operating appears to be one of the things that can be acquired by any mechanic as a result of a little education. It grows in direct proportion to his experience.

Illustrations on these pages show some welding enthusiasts at work and the product of their labors. The action photographs were supplied by the Lincoln Electric Co. The shop-made equipment pictures are from the prize winning paper of E. W. Weinberger in The James F. Lincoln Arc Welding Foundation contest.



1. In the arc equipped Red Arrow Freight Lines shop split rims and wheels have lost their sting. The Welder salvages a wheel in almost the time it takes a driver to get his clearance papers, eliminating the delay in getting the part and the cost of replacement.

2. Construction work, especially on the large dams, is hard on transportation equipment and delays costly. Brown and Root, contractors at the Marshall Ford Dam, have welders going almost continuously. This one is repairing the body of a gravel truck.

3. Another welding job by McKenzie Construction Co. at Marshall Ford Dam. This time the welder on a port-

able rigging is brought to the job where it adds a brace to a 6-cu. yd. dump body.

4. Motor analyzer made from a collection of instruments and some scrap metal with the help of a welder.

5. The welder has invaded the body department. Here it is being used to repair the door braces of a vehicle that has been in a collision.

6. "Headache posts" are standard equipment on trucks in the oil fields. They are fabricated from pipe bent to proper shapes and joined by welding.

7. Towing a truck with a tractor gets it out of the mud but frequently distorts the frame. This truck after being repaired is having a reinforcing plate added so it can withstand further towing.

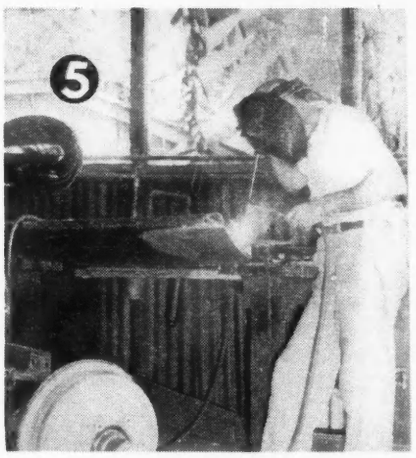
8. A cracked fifth wheel getting "sewed up" so that it can go forth to the wars again.

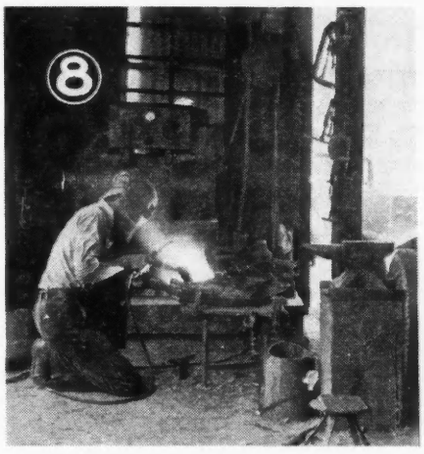
9. The electric arc acts as a "zipper" on a lengthy break in the side of a car carrier belonging to Motor Express Co.

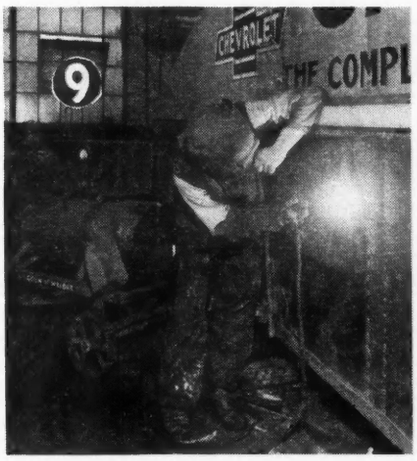
10. Shop equipment can be made from scrap with a welder. This is a polishing stand. With slight modification it can be made into a portable work bench.

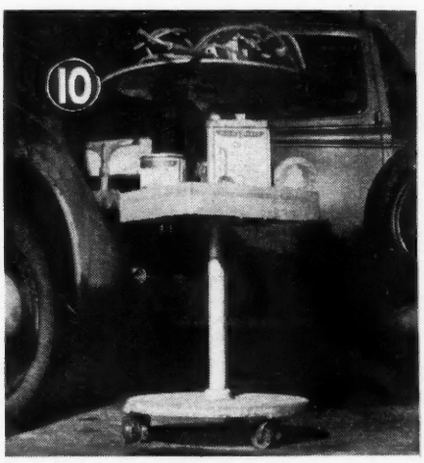
11. The motor analyzer shown in Fig. 4 after six years' growth.

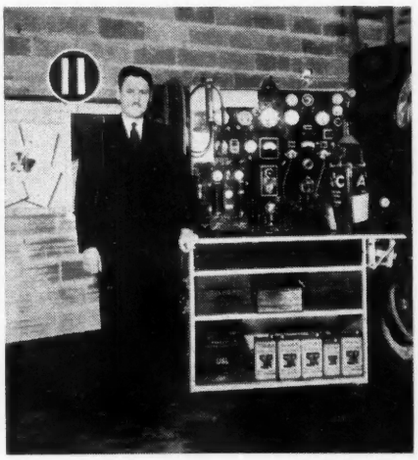
12. A shop-made puller. A nut to fit the pinion shaft is tacked onto the head of a bolt. The nut is screwed onto the pinion shaft and the bolt inserted through a flat plate. A nut screwed on the bolt pulls the pinion shaft.

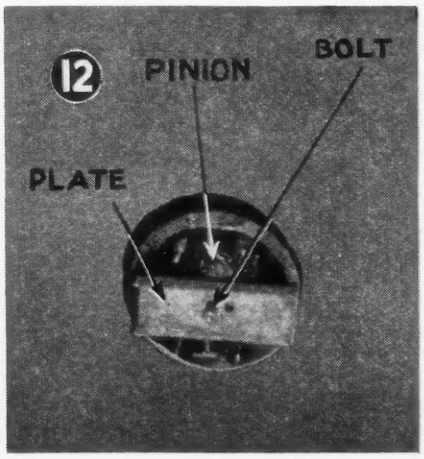












AFTER Hours

EDITORIAL COMMENTS BY GEORGE T. HOOK, EDITOR

A FRANK DISCUSSION OF THE FUTURE OF TRUCK SHOWS

IT can be said truthfully that the National Motor Truck Show, held in New York City last month, was the best exhibition ever put on by the truck industry. Many of the companies that participated deserve high praise for giving their displays the benefit of a very generous purse. All of the exhibitors are to be complimented for giving those who attended the show a greater pride in their industry.

However—and we take no pleasure in reporting this—the attendance was a keen disappointment. COMMERCIAL CAR JOURNAL is reliably informed that the total attendance for the seven days was not more than 25,000. This is a fraction of the attendance that was expected. There is some comfort, but not much, in the opinion expressed by quite a number of exhibitors that although it lacked quantity the attendance was definitely quality.

Considered as a whole the show must be set down in the record as a failure. Compared with previous ones the show was nothing short of gorgeous. From the display standpoint it was a success. But from the point of view of the industry, which poured into it at least a quarter of a million dollars directly and indirectly, the show was a dismal flop because its return on the investment was meagre if, indeed, it was measurable at all.

IT would be possible to speculate on reasons for the failure—indulging in finely drawn arguments based on the long week-end holiday of three days in which the show opened, on the admission fee which kept out the general public, and on the confusion attending the distribution of free tickets to members of the industry—but to what purpose? The reasons, moreover, would not be conclusive because this year attendance at automobile shows is considerably off in most cities.

It is quite likely that many factory executives would rather we didn't remind them of the show. It is more than likely that most of them would be disinclined to talk about a show for next year—except to relieve themselves of a sizzling complaint against shows in general. We know of more than one executive who vowed "never again!"

Nevertheless, at the risk of being tossed into a wastebasket we wish to express an opinion and mention several factors that might be considered before any decision against holding a show next year is made.

FIRST of all, before any decision is made the industry must come to some sort of an agreement on one extremely important point: What is the object of a motor truck show? Is it solely to attract prospects that can be turned into sales? If that is to be its purpose the show idea should be wrapped up neatly and dropped into the nearest ash-can. Because any exhibitor, without benefit of half a dozen cocktails, will confess that all the truck sales resulting from a show can be handled by a vice-president in charge of sales, who hasn't closed an order in the last 10 years, in a single day with time out for a three-hour lunch and a double-header in the afternoon. The industry does not need shows to sell its trucks, its parts, its equipment and its accessories. If it does, then its distributing system is in need of an overhaul. Actually an exhibitor can get more for his show money by investing it in his sales force.

It is our opinion that the prime object of a show should not be to sell trucks *to* the public but to sell the public *on* trucks. A truck show should be educational—and let the sales fall where they may. That will be in the lap of the industry because an effective job of education will make life easier for those who operate or contemplate operating trucks . . . and encourage the purchase of trucks and more trucks.

IN this educational aspect the show would sell the public on the importance of truck transportation to a community and to each member of a community. The exhibits, therefore, would have to include displays of an educational nature. A special show committee—composed of advertising and sales promotion managers—should take charge. It would allocate educational ideas among exhibitors and supervise their realization and coordination within the show.

These educational displays would dramatize the part played by trucks in the delivery of milk, bread, meat, farm produce, coal, department store purchases, etc.; the part they play in agriculture, in industry; what they represent as a medium of employment and as a payer of taxes. They would show trucks not as so many wooden boxes on wheels, but as being insulated, refrigerated, armored, constructed of steel, aluminum, plywoods and plymetals . . . and for what purposes.

The possibilities for dramatic displays are endless. To develop the facts to be incorporated in them the assistance of the National Highway Users Conference, of trade and trucking associations and of individual fleet operators should be procured. Their willingness to cooperate should be taken as a matter of course.

SUCH a show should not have an admission charge. It should play free to young and old, rich and poor, customer and non-customer, prospect and non-prospect. Youngsters particularly should not be excluded. The truck industry has just as important an educational job to do with Young America as it has with Adult America. It need only remember that the

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Standard Equipment—

JACKS

ARE A JOKE

. . . say fleet operators to the truck makers in CCJ jack survey. They want good jacks on trucks and by good they mean hydraulics of ample capacity

FLEETMEN want bigger and better jacks for their trucks. They have a definite yen for the hydraulic type and buy this kind by a four-to-one majority for replacement. Most of them keep jacks on all or part of their trucks at all times.

While most city operators rely on their own service trucks or even independent service stations for tire repairs, a big majority of all fleet owners make sure that their trucks are equipped with adequate jacks.

These were the basic facts developed by a survey recently addressed to 2000 fleet operators by COMMERCIAL CAR JOURNAL.

A preliminary study revealed that of 19 truck manufacturers who represented 97 per cent of all trucks produced, all equip their trucks with some form of jack as standard equipment. Six of these manufacturers use all mechanical models, three use all hydraulic, eight use some of both types and three did not specify.

But that fleet operators had their own, and not too favorable, opinion of the type and size of jacks furnished by the manufacturer was very definitely apparent. Said one operator:

"We feel that a truck needs a jack and not the plaything the manufacturer puts in and calls a jack. The jacks which come with the trucks are not used. As we buy new units, each is equipped with a 12-ton hydraulic model. We have a smaller size for Fords and other light trucks." And he has this to say, in passing, about the theft problem. "Each jack is marked with the company name and truck number which is stamped on with center punch. We have lost only

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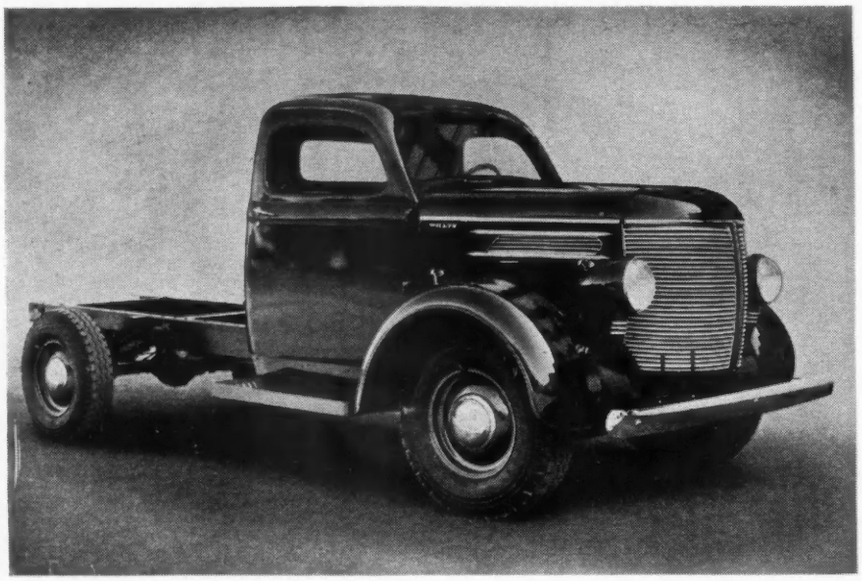
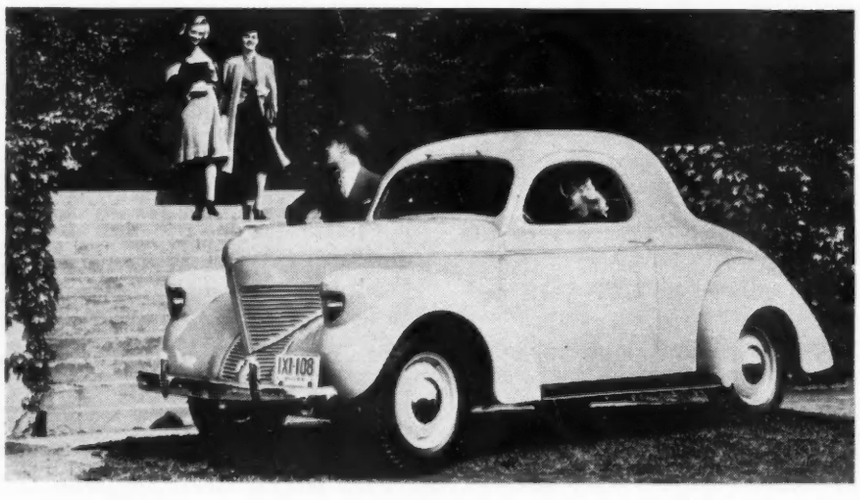


Above—Front-end styling of the new Willys-Overland 1-ton, 4-cylinder model. Bottom—1939 styling of the new Overland, which differs from Willys models

1-TON MODEL FOR WILLYS

Equipped with a four-cylinder engine and available in two wheelbases is aimed strictly at 1-ton field



THE Willys-Overland Co., Toledo, Ohio, has announced a 1-ton truck available in 123 and 147 in. wheelbase lengths. The powerplant is the Willys 4-cylinder engine which produces 48 h.p. at 3200 r.p.m. A full-floating axle is standard.

Body length to wheelbase ratio is unusually favorable. Engine and cab are located well forward, resulting in long body possibilities. Back of cab to center of rear axle distances are 60 in. on the 123-in., wheelbase chassis and 84 in. on the 147-in. wheelbase chassis. Eight and 11 ft. bodies, respectively, give a body-load distribution of 90 per cent on the rear tires. The gross load distribution is approximately 30 per cent on front and 70 per cent on rear tires.

The Willys-Overland one ton truck has been produced to fill the requirements of the 1-ton field. Sufficient power for normal use is provided by the Willys 4-cylinder engine. With a displacement of 134.2 cu. in., it produces 100 lb. ft. of torque over the wide range of 1400 to 1900 r.p.m. The taxable horse power is only 15.63. Hard steel exhaust valve inserts, balanced crankshaft and "Float-O" oil intake are but a few of the features built into this engine. The mounting is rubber and the transmission is attached to the engine by a rugged cast housing. Road speed is 54 m.p.h., with standard axle ratio and 7.50 tires at 3,000 r.p.m. of engine.

The clutch is 9 in. in diameter with prelubricated ball type throw-out bearing. Universal joints are of needle bearing type, easily lubricated. Four speed transmission is provided as standard equipment.

Rear axle is of the full-floating, spiral bevel gear type. Tread is 61¼ in. Front axle is a heavy, forged, heat treated I beam. The 16-in. tire size has been selected and standard equipment is 6.50/16 front and 7.00/16 single rear. Larger sizes are available to most specific requirements.

Springs are semi-elliptic front and rear with a new design of rubber shackle at all points. Rear springs are 45 in. long and 2½ in. wide, mounted on top of the axle and side of the frame. Helper springs are available. Front springs are 36 in. long and 2 in. wide. All springs are

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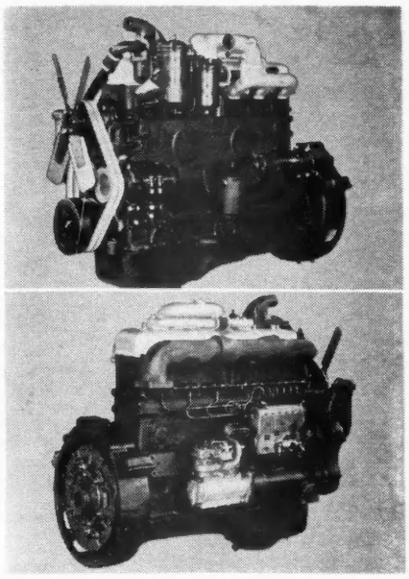
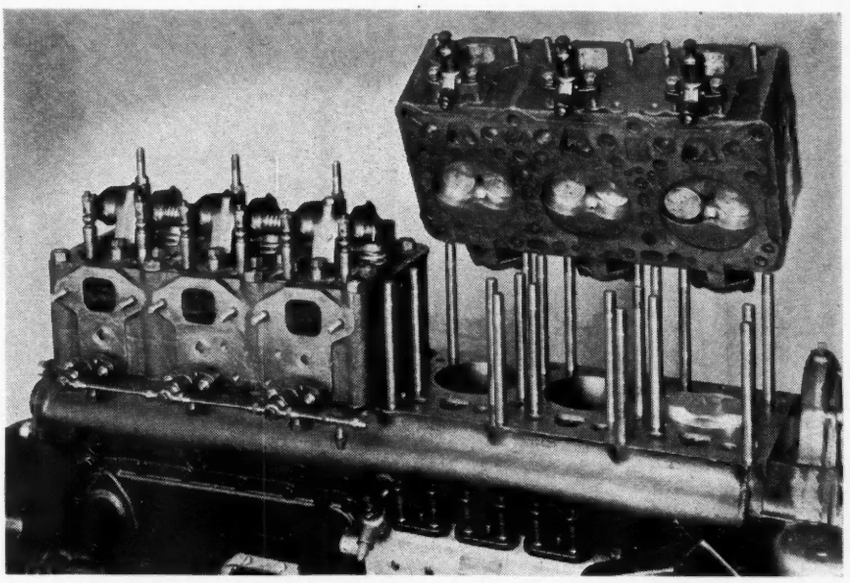
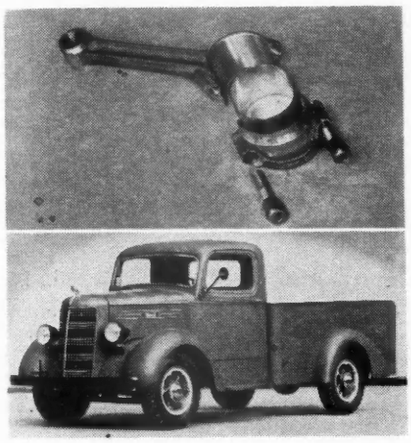


Above—Left and right side views of Mack-Lanova, using Bosch equipment



Above—The Mack-Lanova diesel with one head removed, showing valve location and the Lanova energy-cell combustion chamber design which Mack is employing



Above, top—The angle split connecting rod with shimless bearing shell

Above, bottom—The new light chassis which has a gross rating of 8500 lb.

MORE MOVES BY

MACK

Develops Mack-Lanova diesel engine that will be built in its own plant and adds a lighter chassis

MACK TRUCKS, INC., announces a Mack-Lanova diesel engine built in its own plant and a new light chassis with a gross vehicle rating of 8500 lb.

One engine size is available at present. It is a 6 cylinder job, 4⅜ in. by 5¾ in., having 519 cu. in. piston displacement and developing 131 h.p. at 2000 r.p.m. Maximum torque is 381 lb.-ft., the brake mean effective pressure being 110 lb. The engine is of conventional six-cylinder form and operates on the four-stroke cycle. Injection equipment is Bosch and the starter operates on 24 volts. The engine employs the Lanova energy-cell combustion system.

The cylinder block and crankcase are cast integrally, forming a compact unit, braced by seven bulkheads supporting the main and camshaft bearings and extending well below the crankshaft level. It is cast of high-nickel chromium semi-steel. Cylinder bores are lined with dry-type sleeves of high-nickel-chromium semi-steel. The heads are cast in two interchangeable blocks of three and are retained by 40 studs. Solid copper gaskets are used between heads and the block. Valves are overhead.

Rocker arm covers are aluminum castings. The top of the head is recessed so that the cover gasket surface is raised above the maximum height to which overflow oil can rise, so that leakage of oil is prevented without requiring high pressure on the gaskets. An effective ventilation scheme avoids pressure within the rocker-arm chambers.

The combustion chamber in each cylinder is of figure 8 form, the valves opening into the two lobes, between which there is a narrow throat. On one side of this throat is the in-

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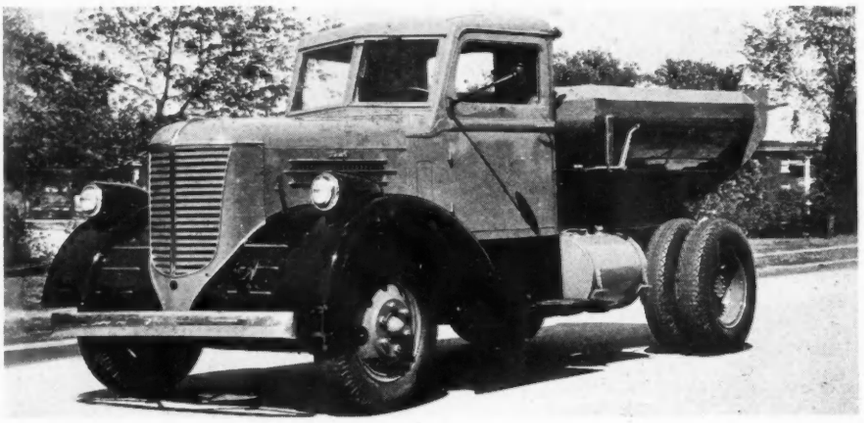
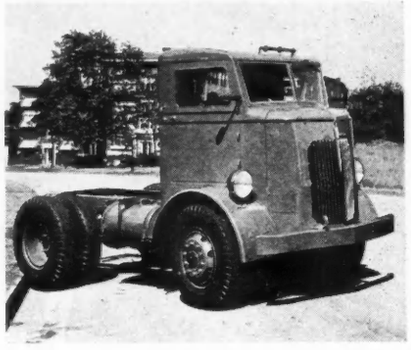


DART

RESTYLES LINE

At right are views showing how Dart has restyled its standard and C.O.E. models. Also shown is the Super-Colossal with two butane-using engines



THE Dart Motor Truck Co., Kansas City, Mo., manufacturing a full line of trucks ranging from 1½ ton to 7 ton capacity, powered with Hercules engines, has redesigned its standard models to give them more eye appeal. A new rounded radiator shell with horizontal grille bars together with new headlights and front fenders give a pleasing appearance. Hood louvers are openings covered with grille wire and trimmed with three horizontal chromium bars. A three-man cab with V-type windshield is arranged and appointed for driver comfort and convenience. Cab-over-engine designs are available in all models. Specifications are printed elsewhere in this issue.

On special order the company builds trucks for off the highway use that are too large to be used on any highway. Illustrated is one known as the Super-Colossal. It has two 200 hp. engines equipped for butane. It is designed to pull a trailer that carries an 80-ton payload for a gross vehicle weight of 225,000 lb. The tractor is 10 ft. 6 in. wide. Drive is by electric transmission eliminating transmission and drive line. Top speed is 35 m.p.h.

ANTHONY

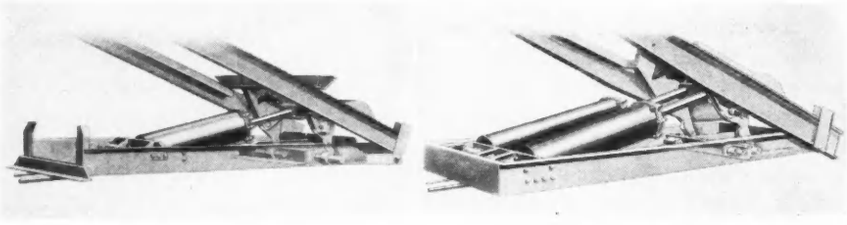
ADDS OK LIFTS

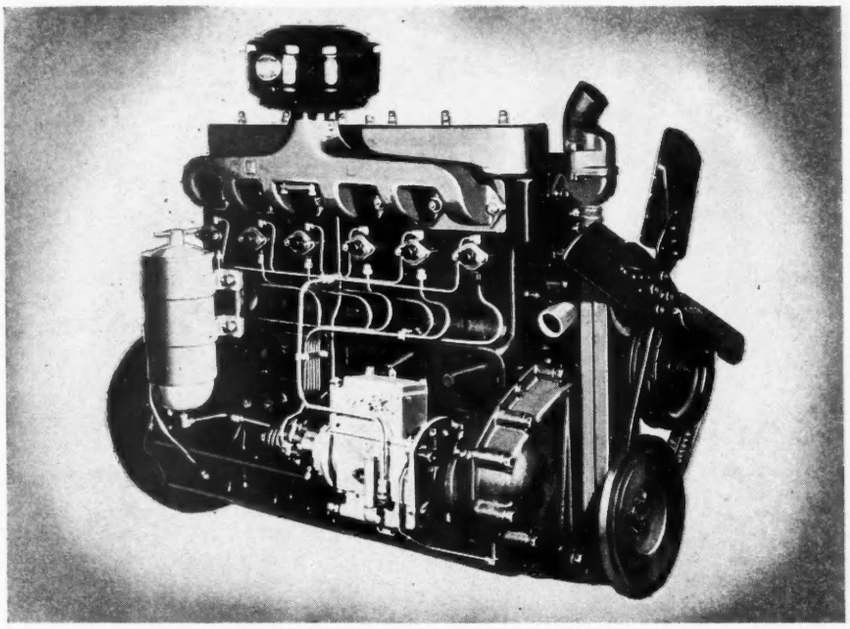
Single and double-cylinder types of hydraulic hoists made by Anthony. The telescopic frame principle makes possible extremely low loading height

THE Anthony Co. Streator, Ill., is in production of six additional models of their "OK" low loading height hydraulic hoists and dump bodies.

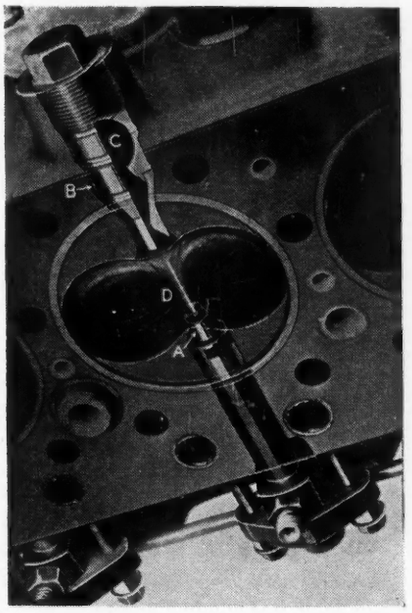
This completes their line of low loading height hydraulic hoists and makes eight models, ranging in capacity from 5 tons for the low price 1½-ton trucks up to 30 tons for the heaviest of heavy-duty six-wheeler trucks.

The telescopic frame principle makes possible extreme low loading height without in any manner reducing sizes of structural members and thereby structural strength. These hoists are "table" models, in that they are self-contained units and use the chassis frame in no manner except to carry the load.





Dodge departs from its traditional L head design to employ overhead valves in its new diesel engine which incorporates many regular Dodge features



The combustion chamber is double O shaped with double chamber energy cell

DODGE DIESEL

With dimensions and mountings identical with Dodge gasoline engine develops 95 hp. at 2600 r.p.m. Energy cell combustion chamber, automatic control of injection timing and fuel regulation are features

DODGE TRUCK DIVISION of Chrysler Corp. has released complete details on the Dodge-built diesel engine for its 3-ton trucks. The new diesel is of 331-cu. in. displacement, with torque and power ratings of 226-lb.-ft. at 1000 r.p.m. and 95 hp. at 2600 r.p.m. A 14.5 to 1 compression ratio is used.

The engine is of the six-cylinder, four-stroke cycle type with 3¾ in. bore and 5 in. stroke. Its general dimensions, mountings and crankcase structure are identical with those of the 3-ton truck gasoline engine, which permits notable economies in the manufacture and installation of the engine. The design embodies full-length water jackets, valve seat inserts, by-pass thermostat and chain driven-camshaft. The cylinder block is of nickel-moly alloy.

Tin-plated, steel-strut, autothermic pistons are employed, permitting extremely close piston fits. Three compression and two oil rings are used, the upper ring being ⅝ in. below the top of the piston so that it is always in contact with the water-jacketed portion of the cylinder wall. The rings are tin-plated to prevent scuffing during the break-in period.

Seven precision-type replaceable main bearings, 3 in. in diameter, are employed giving 36.89 sq. in. of projected bearing area. Copper-lead bearing material is used in conjunction with Tocco hardened crankshaft journals. Connecting rods have 2 5/16 in x 1 7/16 in. replaceable copper-lead crankpin bearings.

Full-pressure lubrication is supplied to main, lower connecting rod, and camshaft bearings, all valve-operating mechanism, and the fuel injection pump. Positive oil cooling is secured through the use of a water-cooled oil gallery at the top of the crankcase and a 14 qt. capacity oil pan. An extra large capacity replaceable element type lubricating oil filter is supplied as standard equipment.

The electrical system is full 24-volt throughout to provide adequate cranking ability. When starting, application of the full 24-volt potential is automatically delayed until after engagement of the starting motor is completed. An electric air heater is located in the intake manifold and

(TURN TO PAGE 59, PLEASE)

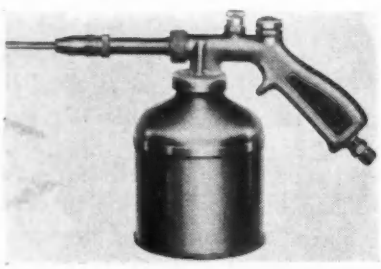
SHOWCASE

OF NEW PRODUCTS FOR FLEETS

Radiator Spray Gun

A new spray gun, designed specially to permit quick, easy painting of radiator cores without removing the grilles, has been made available by The DeVilbiss Co.

The nozzle is simply inserted in the grillwork openings, and a well-atomized, oval spray paints the core surfaces without messing up the grille. The air tip and nozzle construction of the gun provides a

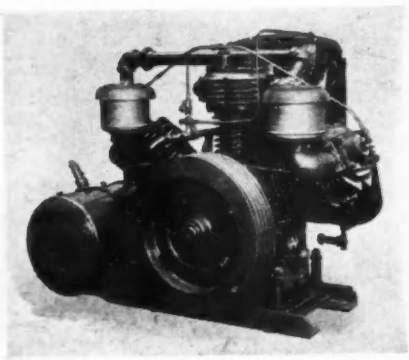


minimum of fluid flow for any given pressure. Both atomizing air pressure and fluid flow are conveniently adjustable. The trigger button is placed on top of the handle for easy control by the operator's thumb. The paint container holds 1 qt.

Complete information on the new radiator core spray gun, known as Type HMC, may be secured from The DeVilbiss Co., Toledo, Ohio.

Worthington Compressor

Worthington Pump and Machinery Corp., Harrison, N. J., has developed a portable air compressor with power take-off drive. It consists of a compressor driven through a Multi-V-Drive by a Hercules drive unit

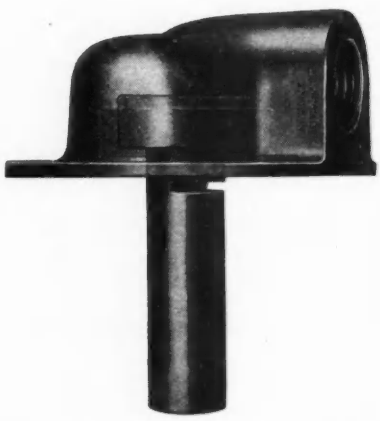


installed between the truck transmission and the front universal joint of the propeller shaft. The compressor is the 3-cylinder two-stage radial air-cooled type, and includes the improved feather valve, ring-type fins, large sectional type intercooler, articulated connecting rods, force-feed lubrication, and by-pass unloading.

A bulletin illustrating applications, with complete specifications, has been issued. Write for Bulletin H-850-B55.

Gasoline Signal

The Ventalarm is a low pressure whistling signal which is installed in the top of the gas tank. The vent leads from the device acting as a conduit for the whistle. When the filling starts the signal starts whistling and continues until the

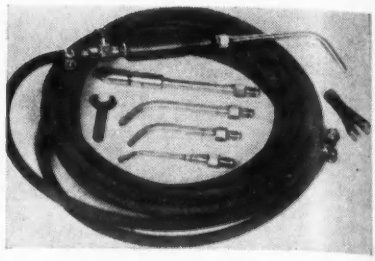


rising gasoline seals the whistle tube hanging in the tank and cuts off the air stream to the whistle. Complete details can be obtained by writing the Scully Signal Co., 89 First St., Cambridge, Mass.

Body Soldering Outfit

A Prest-O-Lite air-acetylene soldering outfit, developed primarily for automobile body work and designed for use with welding size acetylene cylinders or small medium-pressure acetylene generators, has been announced by The Linde Air Products Co., Unit of Union Carbide and Carbon Corp., New York City.

This outfit will be useful for a wide



range of body solde ing operations. It includes four different size items for fine, light, medium and heavy soldering, and for brazing and heating. Also included is an enclosed-flame soldering copper for work in confined spaces where an open flame might damage adjacent materials.

New Propeller Shaft Brake

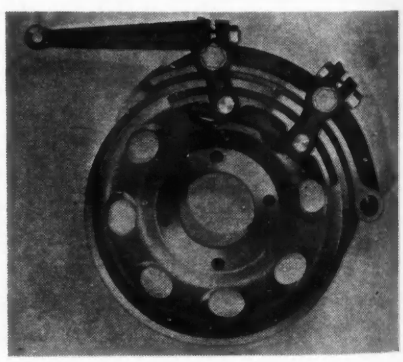
The Detroit Duo-Grip Brake Co. has a new propeller shaft brake. It claims greater braking power with less effort, smoother braking on all stops, greatly increased lining life, and quick, easy, cheap, lining replacement.

The brake utilizes two shoes located on the inner and outer surfaces of the brake drum and actuated by two adjustable forks. When the brake lever is applied, inner and outer shoes are drawn toward each other simultaneously, gripping the drum on both its interior and exterior surfaces. Rapid cooling is made possible by the fact that two-thirds of the brake drum is exposed to the air. In addition, the web of the drum is perforated with eight angular holes which produce an impeller action when the drum rotates.

Spare shoes (already lined) can be applied in less than 20 minutes.

Brakes are made in two types, the double fork adjustable type and a single fork non-adjustable type, designed for lighter duty service. The heavy-duty type is suitable for loads up to 60,000 lb.

The manufacturer recommends the use of the brake not only as as "emergency" brake, but as an auxiliary brake on all stops. Production at present is limited to



original equipment. The manufacturer expects to be able to furnish brakes for replacement in the near future.

Radiator Cap

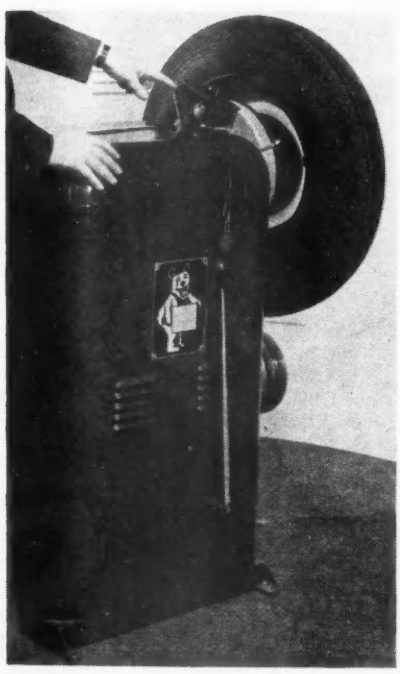
The Illsley Co., Muskegon, Mich., has a new sealing radiator cap which seals the filler opening with a synthetic rubber diaphragm supported by a coil spring up to 4 lb. pressure. No soldering or changing of filler necks is required.

Oblong Fountain Brush

New oblong model brushes in various sizes have been added to the Beaurline brush line. They are fountain brushes which connect to the hose and supply water to the surface being brushed. For full details write the Beaurline Fountain Brush Co., 1243 Wabash Ave., Chicago, Ill.

New Front End Equipment

A new streamlined dynamic wheel balancer which uses the neon eye principle of wheel balancing has been announced by Bear Mfg. Co., Rock Island, Ill. The new equipment has several improvements which

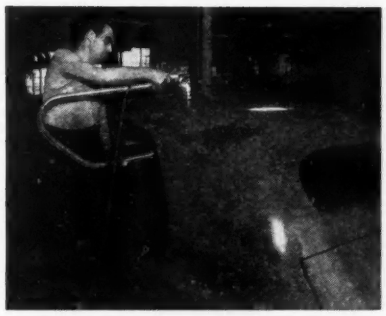


make it more useful in correcting steering troubles and shimmy encountered at high speed.

In addition the company has announced a new low cost front end machine which is completely equipped to perform a complete front end service. The Bear Junior headlight tester is said to be the first headlight tester at a low price to perform all of the functions of the regular model.

New Body and Fender Tool

A new body and fender straightener has been announced by Ingersoll-Rand. Known as the Size 77, this tool is operated by air at 90 lb. pressure and delivers 7500 blows per minute. It is intended for smoothing or ironing out dents, wrinkles, humps and rough spots from automobile bodies and fenders, after the damaged part has been reformed to its approximate original shape. The tool is available with three different sizes of yokes. Standard equipment includes four assorted dollies, two upper dies, one wooden dolly holder, one small yoke, one medium yoke, and air hose with connections. For further information write for bulletin 2516. Copies are available



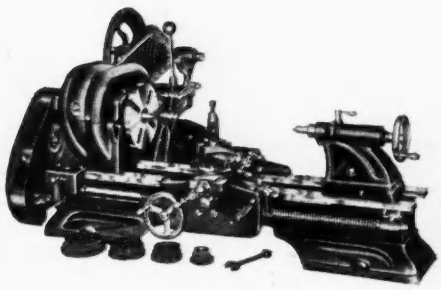
from Ingersoll-Rand Co., 11 Broadway. New York City.

Truck Flares

Two new truck flares approved by Underwriters Laboratories and complying with state and ICC requirements are available. One unit is of the stacked bracket type which employs 18-gage steel throughout. A spring and cam type lock prevents all rattle and eliminates wear. The other unit includes a baked enamel case which holds in addition to the flares, flags and fusees. Flags and fusees are carried in the lid while flares are held in place by angular spring hold downs. For full information write to Anthes Force Oiler Co., Fort Madison, Iowa.

New Atlas Bench Lathe

Power cross feed mechanism will be furnished as standard equipment with new Atlas Press Co. 10-in. models, the first time this feature has ever been incorporated in a popular priced precision bench



lathe. A "preview" folder contains pictures and brief descriptions of all new Atlas 1939 machine tools and shop equipment. Write Atlas Press Co., Dept. 7. Kalamazoo, Mich.

New Type Skid Chain

A new type of skid chain has been placed on the market by the Tire Tractor Corp., 6908 Market St., Upper Darby, Pa. It consists of a fabric and rubber cleat held in place by side chains which do not contact the road. The studs are made with borium, a new material, and are imbedded in the fabric and rubber cross-link. For complete information and prices—write the manufacturer.

FREE BOOKS

BOOKLETS — PAMPHLETS — CATALOGS

. . . a special selection made by the editors . . . for your copy write direct to the address given . . . to hurry it along mention Commercial Car Journal

Welding Procedures

Procedure for producing all types of welds in mild steel, for welding all metals used to any extent industrially and for applying surfacing material to meet any type of wear action in service are given in a new bulletin which the Lincoln Electric Co., 12818 Coit Rd., Cleveland, Ohio, has just made available. Write for your copy.

Electric Tool Manual

One of the most comprehensive catalogs ever compiled illustrates by means of actual photographs the full line of electrical tools for the industrial and automotive trades. It is really a manual that gives precise and exhaustive information on each tool together with technical descriptions so that the buyer can get a full idea of what the various tools are for and what they will do. Copies will be sent upon request to The United States Electrical Tool Co., Cincinnati, Ohio, without obligation.

Oil Filtering Facts

A great deal of information on oil filtering has been gathered together and published in a single volume. The name of the pamphlet is Oil Facts. Your copy is available at The Reclaimo Mfg. Co., 2306 N. Western Ave. You can get it by writing for it.

Stopping Chart

A very colorful Stopping Distance Chart, made up to illustrate the distance a car is required to travel before coming to a safe, positive stop in car lengths, rather than the conventional method which has heretofore been used, designating so many feet, has been prepared by The Gatke Corp., 228 N. LaSalle St., Chicago, Ill. Ask Gatke for your copy.

NEWS

October Shows Gain

Truck production in the U. S. and Canada for October was sharply up from the previous month. The total for October was 22,390 as against 20,174 for September. This compares with 31,939 units produced in October of 1937. Total for the 10 months of 1938 was 409,556; the 10 month 1937 total was 947,502.

ICC Private Carrier Hearings

ICC Examiner R. W. Snow will hold nine hearings to determine if in the interest of safety it is necessary for the ICC to prescribe regulations, maximum hours of service and equipment standards for private carriers. In addition to testimony on the need for Federal regulation of private carriers the Examiner will consider it helpful to receive evidence as to what changes, if any, should be made in the existing regulations for common and contract carriers to make them applicable to private carriers.

Printed copies of the regulations may be obtained from the Supt. of Documents, Government Printing Office, Washington, D. C. Motor Carrier Safety Regulations are 10 cents per copy and Motor Carrier Hours of Service Regulations are 5 cents. Places and dates of hearings follow:

Jan. 9, 10 a. m., Interstate Commerce Commission offices, Washington, D. C.; Jan. 12, 10 a. m., Hotel New Yorker, New York; Jan. 16, 10 a. m., Hotel Sherman, Chicago, Ill.; Jan. 19, 10 a. m., Hotel Nicollet, Minneapolis, Minn.; Jan. 23, 10 a. m., U. S. Court House, Spokane, Wash.; Jan. 25, 10 a. m., Hotel Multnomah, Portland, Ore.; Jan. 30, 10 a. m., California Railroad Commission, Los Angeles, Cal.; Feb. 3, 10 a. m., Hotel Fontenelle, Omaha, Neb.; Feb. 6, 10 a. m., Hotel Peabody, Memphis, Tenn.

Hearing Delay Petitioned

The National Council of Private Motor Truck Owners has petitioned the ICC to postpone the hearing on the establishment of maximum hours of service and equipment standards of private carriers scheduled for Jan. 9 at Washington. Petition asks that date be set back to Feb. 15 and that all other hearings be moved back accordingly for the following reasons: organization finds it impossible to gather and prepare data by scheduled date and that private carriers outside the organization will be in position to supply comprehensive data if time limit is extended.

Fruehauf Appointments

Harvey C. Fruehauf, president of the Fruehauf Trailer Co., announces the appointment of William R. Myers as plant manager and John W. Votypka as chief engineer.

These men come to the Fruehauf organization with years of practical, varied experience in the automobile industry. Mr. Myers has been connected with Detroit Screw Works, Wadsworth Mfg. Co., Chrysler, Marmon, Hudson and Briggs Mfg. Co., serving during the past four years as manager of the Meldrum Avenue plant for Briggs in Detroit. Mr. Votypka has been associated with such well-known firms as Fisher Body, Hayes Body, Peerless, Hupmobile, Ford Motor Co., and for the past 12 years has served as chief engineer for the LeBaron division of Briggs Mfg. Co.

The Trailer Co. of America will award the Trailmobile Trophy annually to the motor carrier who is best prepared, above ordinary precautions, for safety and to render aid and service to the public on the highways. Under the direction of the American Trucking Associations Inc., the details have been developed by special committee.

11 States in Labor Pact

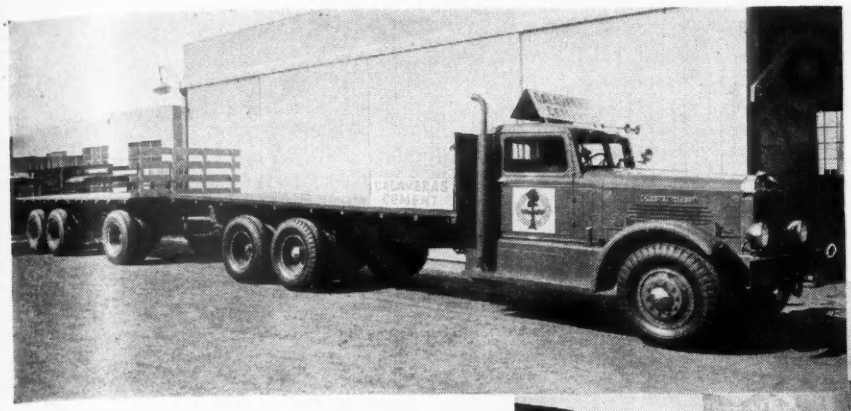
Truck operators and labor leaders representing the over-the-road drivers in 11 western states, have reached an agreement in their long dispute. John L. Keeshin, head of Keeshine Transportation Co., Chicago, chairman of the operators' committee, presided over the final session. It is expected that the pact will insure permanent harmony between operators and drivers.

The states included in the pact are Michigan, Ohio, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota and Nebraska. Also included are Kansas City, Kan., and territory contingent to the south bank of the Ohio

(Turn to Page 42, Please)

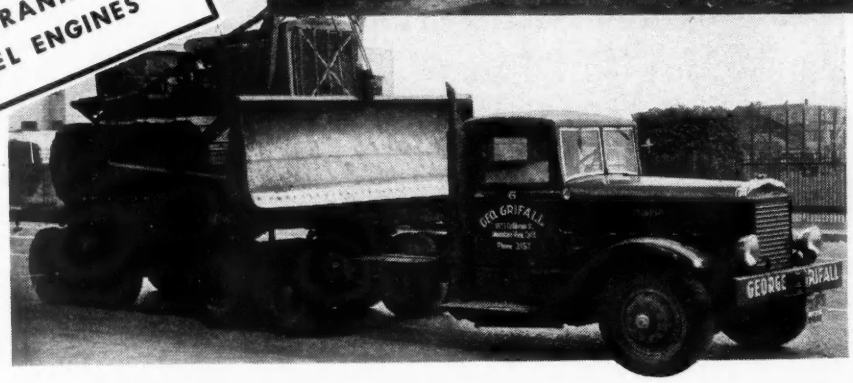
New Truck Registrations by Makes by Months

	Auto-car	Brock-way	Chev-rolet	Diam-ond T	Dodge	Fed-eral	Ford	G.M.C.	Hud-son	Inter-nat'l	Mack	Ply-mouth	Ree	Ster-ling	Stew-art	Stude-baker	White Indiana	Willys	Misc.	Total
January.....1938	129	64	10,137	335	3,070	118	9,114	1,746	99	4,501	254	668	216	16	27	158	288	176	227	31,343
January.....1937	130	102	13,975	828	3,073	199	16,230	2,749	278	6,098	382	208	344	22	89	167	583	125	300	45,482
February.....1938	95	57	8,991	338	2,622	109	7,687	1,401	81	3,763	217	562	182	9	19	144	316	138	238	26,989
February.....1937	112	115	7,777	580	4,904	205	16,100	2,987	355	5,136	363	692	305	25	101	215	538	57	292	40,859
March.....1938	110	86	12,233	380	3,666	136	9,898	1,965	77	5,256	352	769	283	17	31	161	394	174	303	36,291
March.....1937	179	140	16,924	815	6,337	236	20,386	4,122	539	5,689	476	1,104	484	23	147	465	647	76	299	59,089
April.....1938	119	127	11,719	393	3,575	136	9,287	1,917	78	4,610	366	757	251	26	43	184	368	175	341	34,672
April.....1937	228	184	21,974	863	3,935	258	22,241	4,671	482	6,710	586	1,143	378	43	118	706	809	107	346	65,782
May.....1938	193	159	10,659	360	3,171	93	8,918	1,810	68	4,281	382	662	287	25	45	221	364	168	340	32,206
May.....1937	197	183	20,146	816	5,893	294	19,884	4,416	489	7,071	579	1,447	411	27	120	701	783	77	440	63,974
June.....1938	235	116	9,912	332	3,055	95	8,427	1,730	65	4,045	317	681	213	21	38	158	308	196	288	30,232
June.....1937	197	139	16,703	644	6,048	223	17,414	4,035	554	6,681	536	1,634	435	33	92	643	668	82	374	57,135
July.....1938	129	99	11,226	382	3,236	117	9,425	1,675	67	4,782	347	660	264	34	36	116	337	182	362	33,476
July.....1937	281	152	17,809	764	6,508	225	18,934	4,237	579	7,539	622	1,715	480	34	107	622	667	99	312	61,686
August.....1938	88	111	11,268	397	3,286	125	9,471	1,909	61	5,381	370	593	231	23	28	209	289	158	253	34,231
August.....1937	174	134	19,477	665	6,906	161	16,526	4,529	539	7,700	430	1,664	337	15	93	556	520	105	341	60,872
September.....1938	129	123	6,577	318	2,285	135	8,296	1,513	28	5,296	353	391	252	19	30	167	303	143	212	26,570
September.....1937	184	94	16,703	649	6,521	131	16,292	3,602	412	6,639	413	1,440	268	32	76	355	508	75	317	54,711
Nine Months...1938	1,229	942	94,193	3,338	28,406	1,071	81,759	15,866	634	42,712	2,981	5,864	2,218	190	299	1,533	2,987	1,528	2,593	290,343
Nine Months...1937	1,685	1,243	154,107	6,860	51,566	1,956	166,704	35,937	4,313	60,296	4,420	11,294	3,523	267	953	4,498	5,784	803	3,137	519,346
% Change...9 Mos.	−27	−24	−39	−51	−45	−45	−51	−56	−85	−29	−33	−48	−37	−29	−69	−66	−48	+90	−17	−44

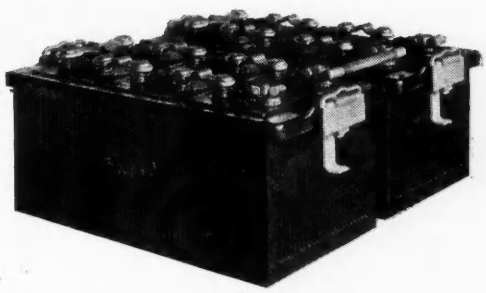


Diesel-powered trucks made by the Autocar Co.

Exide
BATTERIES
FOR CRANKING
DIESEL ENGINES



Many operators of Diesel-powered trucks rely on Exide for dependable starting . . .



TRUCK operators are becoming more and more aware that the battery problems faced in this type of service differ radically from those of normal passenger-car service. They realize that the best truck battery is far more than just an overgrown automobile battery. And for operators of Diesel-powered equipment, this fact is doubly true.

That is one of the reasons why so many Diesel engines in the transportation and construction industries are equipped by their owners with Exide Batteries for dependable cranking. For Exide took the lead in producing batteries especially adapted for the requirements of Diesel engines.

The Exides for this service deliver the high voltage necessary for high cranking speeds at low temperatures, and do so at no sacrifice of the dependability and economical performance for which Exides have always been known. There is an Exide for every make and type of Diesel engine, from the smallest to the largest. Write for the illustrated booklet, "Electric Cranking of Diesels." It is free.

To mark the fiftieth anniversary of Exide Batteries, a handsome souvenir booklet has been prepared, illustrating the essential part these batteries play in daily life. Write, and we will gladly send you a free copy.

THE ELECTRIC STORAGE BATTERY CO., Philadelphia
The World's Largest Manufacturers of Storage Batteries for Every Purpose
Exide Batteries of Canada, Limited, Toronto

When writing to advertisers please mention Commercial Car Journal

NEWS

(CONTINUED FROM PAGE 40)

River between Portsmouth, O., and Paducah, Ky.

Mr. Keeshin estimated that 1,000,000 employees of trucking concerns are affected by the settlement. About one-third of this number are drivers.

The agreement gives drivers 2¾ cents a mile and 75 cents per hour for pickups en route. Drivers are permitted to make one pickup or delivery en route on the mile basis. The agreement calls also for complete abandonment of lockouts or strikes in the area. Each of the 11 states is to name an arbitration board to handle its labor differences. When an agreement cannot be reached by state arbitration boards, the issue is to be submitted to a regional committee on arbitration, the members of which shall be acceptable to both operators and labor.

The agreement does not cover cartage firms or employees of any trucking company engaged in city pickup and delivery.

Buda Diesel for Fords

The Buda Co., Harvey, Ill., has announced one of its standard production models for installation in Ford truck chassis.

The engine used is a four-cycle, four-cylinder, Buda-Lanova Diesel, Model 4-DT-212, with 3⅝-inch bore by 5⅛-inch stroke, having a 212 cu. in. displacement.

The Buda Co. also has a six-cylinder Diesel now available for C-O-E Ford chassis.

ICC to Determine Jurisdiction

The ICC has instituted an investigation to determine its jurisdiction over the employees, other than drivers, of common, contract and private carriers. The purpose will be to determine whether or not the ICC has the jurisdiction to prescribe qualifications and maximum hours of service of all employees of common and contract carriers or only those whose activities affect the safety of operation of motor vehicles. This investigation together with the hearings conducted by Examiner Snow will determine so far as maximum hours of labor are concerned the status of all employees of common, contract and private carriers.

The administrator of the Wage-Hour Law has been invited to participate in the proceedings. Briefs may be filed on or before Dec. 10. Oral arguments will be held Dec. 16, at the ICC offices in Washington.

New Dodge Factory

A newly completed Dodge truck factory, is said to be the world's most modern plant for the exclusive manufacture of commercial cars and trucks, has been announced.

Completion of the plant is part of a six-million-dollar commercial car and truck manufacturing and sales program on which the Dodge Division of Chrysler Corporation is embarking. The plant will be exclusively devoted to the building and manufacturing of commercial vehicles ranging from ½-ton to 3-ton capacities.

Truck Scale at Bureau of Standards

The National Bureau of Standards, the recognized agency for standardization in the United States, has started the installation of a new 60,000-lb. master scale for weighing motor-trucks and other heavy loads. The scale will be so installed as to serve as a model for motor-truck scale installations, and when completed the bureau will be in a position to make accurate determinations of weight up to 30 tons. This weighing machine which will have a platform of 40 ft. by 10 ft., will be placed in such a position that it will be accessible to motor-truck loads of all kinds.

Re-wiring Manual

A Certified Re-wiring Manual has been published by the Packard Electric Division, General Motors Corp., Warren, Ohio. Price $2.00. It is a well illustrated volume which outlines the problems which confront the electrical department in a maintenance shop and provides the answers. With the book is included a set of questions which are to be answered on a true or false basis. If the questions are answered satisfactorily and sent to the company the mechanic will receive a certificate which shows him to be competent to handle electrical work.

HOOF ANNOUNCES

Greater Gas Mileage

FOR ALL GOVERNOR EQUIPPED FORDS and CHEVROLETS

For the First Time

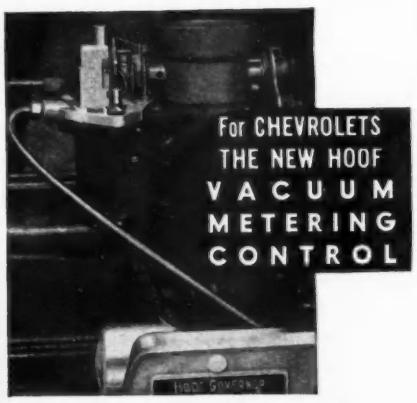
Ford and Chevrolet fleet operators can get more fuel savings from governed speed!

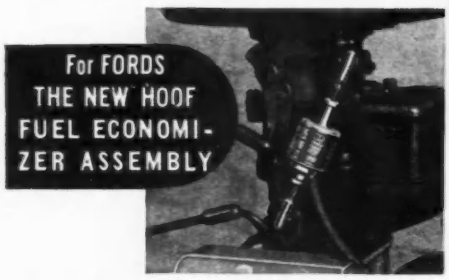
You need more than Governors on Fords and Chevrolets for maximum economy! You need Governors PLUS the new Hoof Chevrolet VACUUM METERING CONTROL or the new Hoof FUEL ECONOMIZER ASSEMBLY for Ford-Stromberg carburetors!

The carburetors on these governor-equipped Fords and Chevrolets unnecessarily waste fuel and dilute the crankcase oil every time the accelerator is pushed down to the floor board. (And 99% of the drivers drive that way!) Both Fords (Stromberg equipped) and Chevrolets have carburetors with mechanically operated power jets which open every time the accelerator is fully depressed without consideration as to the governed speed or load requirements.

No governor can wholly correct this condition. For this reason Hoof engineers have developed these two new devices which, when used in conjunction with governors, provide a GREATER DEGREE OF GAS ECONOMY THAN EVER BEFORE POSSIBLE. Controlled entirely by vacuum, these devices provide an external regulation, which make the functions of the power jet entirely automatic, so that it will operate only when the engine load requires it!

Besides automatically controlling the operation of the power jet, these two new Hoof devices assure correct fuel feeding and greatest fuel economy on governor equipped Fords and Chevrolets regardless of the accelerator position. In the Ford V-8, the Hoof ECONOMIZER replaces the regular pump rod on the carburetor. It eliminates the cause for hard starting and engine flooding as it limits the stroke of the accelerating pump. Where the vacuum piston is built in the governor, it may be replaced with a Hoof ECONOMIZER by disconnecting pump lever arm to governor and substituting the Hoof unit. On the Chevrolet carburetor, the bowl cover is replaced by the Hoof Vacuum Metering Control.





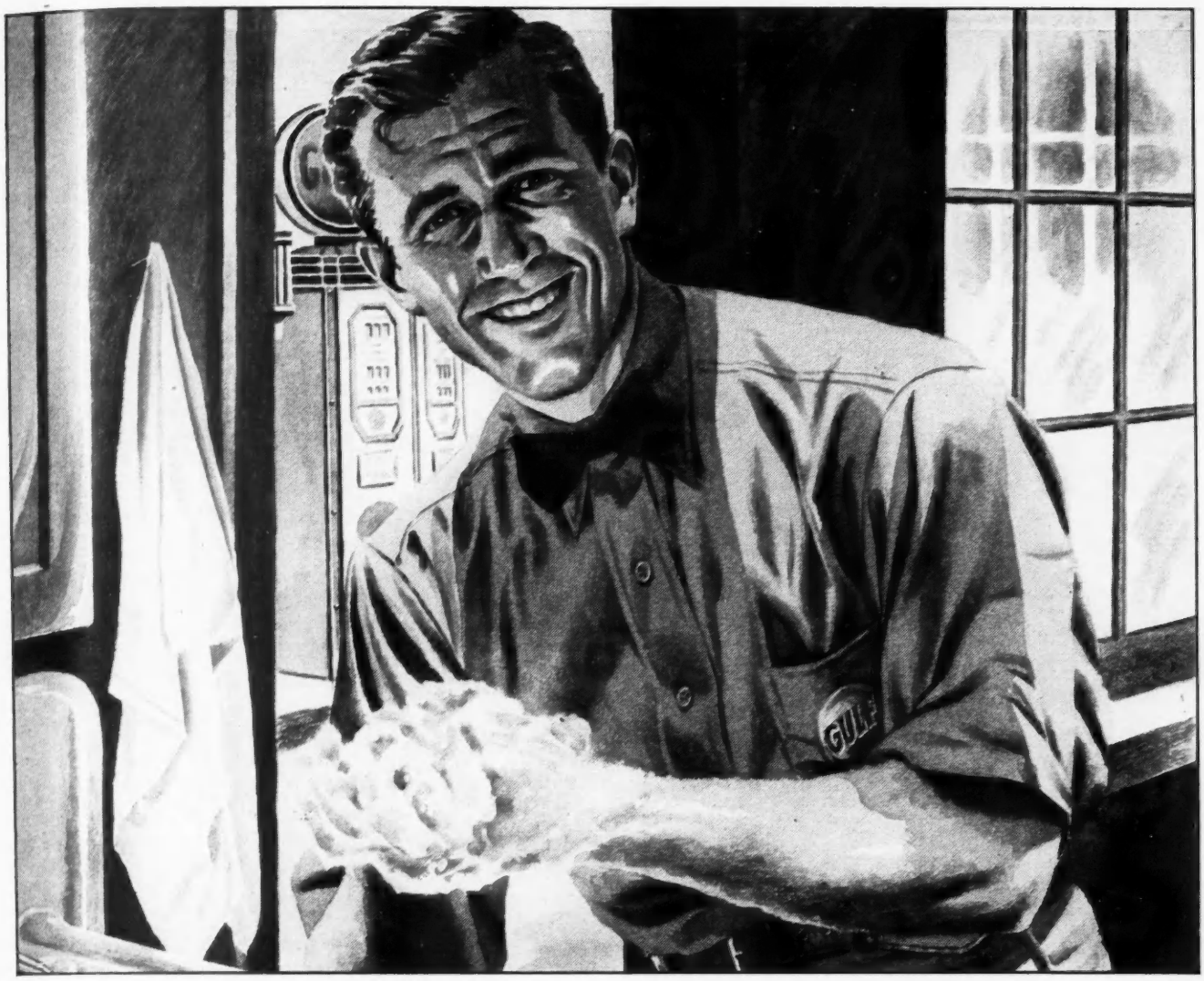
List $2.25 (Fords); $3.25 (Chevrolet)

HOOF PRODUCTS COMPANY

162 N. Franklin St., Dept. BEC Chicago, Ill.

Makers of the famous Hoof Cantilever Governors

SEE YOUR SERVICEMAN OR WRITE HOOF TODAY



"I'm glad my old man came to America"

"EVERY TIME I look at the papers I thank my stars the old man pulled up stakes and came to America before I was born.

"It isn't only that we're a long way from the European scramble. It's that Uncle Sam's country is a lot better and pleasanter place to work and live, and raise a family in.

"The average fellow gets a whack at more of the good things of life over here, and I see proof of it every day right here at my gas station.

"Take most of my steady customers. Not one in a hundred makes a whopping big salary. Do you think they could afford even to *run* cars in most other countries, let alone *buy* them? Not on your life!

"Why, I was reading that gas costs about 33 cents a gallon in England. It's about 30 cents a gallon in France. In Germany, it's about 55 cents a gallon. And it's about 72 cents a gallon in Italy.

"Yet the average price of a gallon of branded gas in America is 13.7¢—with an additional 5.4¢ for taxes.

"Sure, one reason the price is so low is that we've got plenty of oil in this country. But another reason is that the oil companies have never quit trying to find new ways of bringing down the cost of gasoline.

"Back in 1920, for instance, folks paid about 30 cents for a gallon of gas, without taxes, because it cost more to make and distribute gasoline then. That's close to *twice* as much as you pay now without taxes . . . And you're getting a whale of a lot better gasoline now, too.

"It seems to me it's always been the idea in this country to make things better and cheaper so they can be spread around among more people—and that idea is still going strong!

"I'm glad my old man came to America. And I'm glad this is going to be an even better country for *my* kids to grow up in."

GULF OIL CORPORATION · GULF REFINING COMPANY · *Gulf Building, Pittsburgh, Pa.*

An advertisement appearing in daily newspapers to give the public a clearer understanding of the petroleum industry's contribution to better living in America.

When writing to advertisers please mention Commercial Car Journal

MACK DIESEL

(CONTINUED FROM PAGE 35)

jection nozzle, positioned to direct a narrow spray directly across the throat toward the mouth of the energy cell. The latter comprises two small cells, the inner one opening through a venturi into the throat.

In operation, air enters through the intake valve in one of the two lobes. On the compression stroke, this air is squeezed into the confined space of the 8-shaped combustion chamber. During the compression stroke air has been forced into the energy cell, where, owing to restricted cooling, it attains a pressure higher than that in the combustion chamber.

Fuel is sprayed by the nozzle directly across the narrow throat, most of it entering the energy cell. A portion is swept around the lobes in opposite directions. As the fuel reaches the energy cell, it ignites rapidly, causing rapid combustion to take place. Since the volume of air within the cell is small, only a small part of the fuel is thus ignited, the balance being blown back against the stream from the injector. Here it is divided by the form of the throat into two streams to swirl in opposite directions in the two lobes. These streams oppose the direction of rotation of the air and fuel already there, so that air and fuel are well mixed.

Two manifolds are on opposite sides. Both manifolds are in three parts, with individual ports to all valves. The intake manifold is of aluminum and air is drawn through a single air-filter of the oil-bath type. For cold-weather starting, electrical heating elements in the intake manifold are applied.

The seven bearing crankshaft has main journals 3½ in. in diameter and crankpins 3 in. It is fully counterbalanced, 12 counterweights being forged integrally. The shaft weighs just short of 200 lb. It is pack-carburized and case-hardened. Main bearing thrust is taken on the center bearing, separate thrust washers being used at this point. At its front end the shaft carries a Lanchester torsional vibration damper which is incorporated with the fan belt pulley.

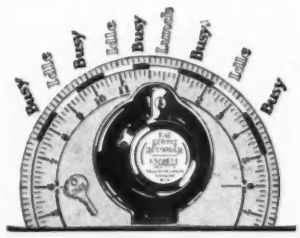
Connecting Rod Details

To permit withdrawal of pistons and connecting rods through the cylinder bore, the connecting rod has its cap split at 35 deg. from the horizontal and is retained by cap screws. To insure a firm joint, the rod and cap make a tongue-and-groove joint with each other, which, combined with precision type cap screws having a body fit in the cap and deep trussed ribbing on the cap, insures rigid backing for the bearing. Both main and connecting rod bearings are of the thin-shell, interchangeable precision type with steel backs, lined with copper-lead.

Alloy pistons are T-slot cam-ground. They carry five rings, including one oil control ring above the wrist pin and one oil ring below the wrist pin. The wrist pin is full-floating running in a thin-shell bushing in the rod and directly in the piston bosses. Retension of the pin is by telescoping aluminum buttons with hemispherical ends ground to the same arc as the cylinder bore. Three oil holes collect surplus oil from the

(TURN TO PAGE 46, PLEASE)

EXPLAIN IT *to Your Drivers!*



The Servis Recorder

- It's a business machine—and its purpose is not to *detect,* but to *prevent.* It keeps trucks from getting into bad habits.

Put This Poster Up Out Back

—tell everybody concerned just what the *Servis Recorder* is and what it does. It's the moral effect that's important. A "pound of prevention" is worth a "ton of cure"!

(Actual size of poster is 14" x 18")

TO OUR TRUCK DRIVERS

Two Things We Want To Do—

First: We want to stay in business for many years to come, and that means we've got to be as efficient as those we compete against. That means that every truck must produce its full day's work — no more and no less.

Second: We want each truck driver to receive a square deal, in order that so far as possible each truck will do an equal amount of work, and do it comfortably.

All right. There is only one way to do this. That is, to put on each and every truck a recording device so constructed that the truck itself will record just what it did all day. An accurate record— a fair and square report— a record that nobody can question.

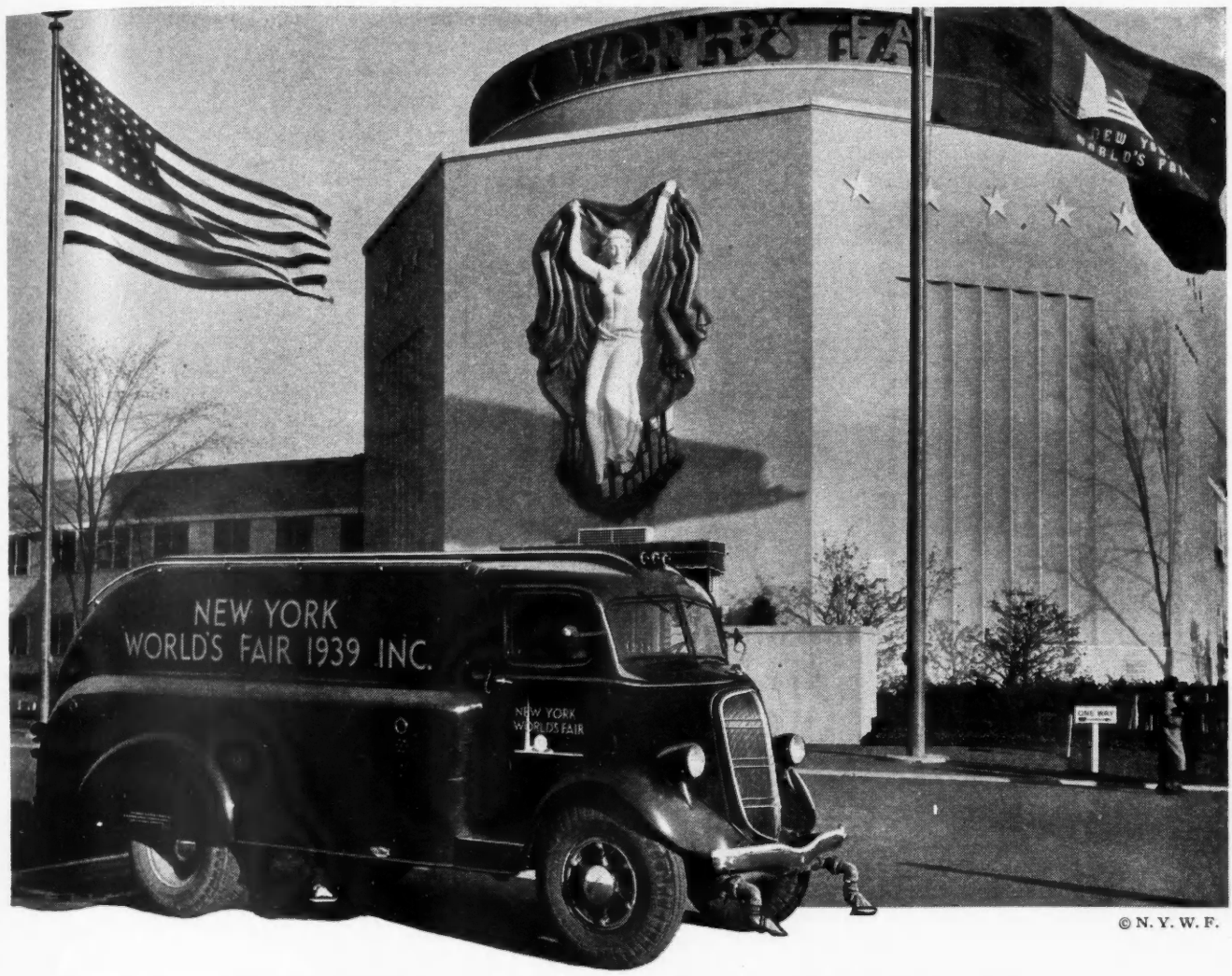
Now then, these records will probably show up a lot of standing time on our trucks. But we know that a large part of this idle time is not the driver's fault at all! There are all sorts of causes for idle truck time. Some of these causes cannot be removed, but a lot of them can! And the only way we can find out is by first getting a record of these delays, a record made by the truck itself.

That's why we are putting on Servis Recorders. This Recorder is already in use on more than 70,000 trucks throughout the world. There is nothing mysterious about this recorder. It's on every truck, in plain sight. It merely records when your truck is operating, and when it is standing. If you as a driver are overworked, it will show it. If you are underworked, it will show that too.

The Management

Send for this poster. It's FREE.

The Service Recorder Co., Cleveland, O



© N. Y. W. F.

STUDEBAKER CAB-FORWARD *Maneuverability*

MODERN AS THE NEW YORK WORLD'S FAIR!

Pioneer of close-coupled convenience in the low priced truck field, the Studebaker Cab-Forward line has won its way into the greatest fleets in America, on sheer efficiency and smartly modern design. Its easy maneuverability in crowded quarters fits it ideally for the exacting official service pictured here.

Studebaker trucks for 1939 range up to 20,000 pounds gross rating (32,000 pounds gross train rating). In both Standard and Cab-Forward models, they are the choice of ever-increasing numbers of progressive fleet operators. Sales and efficient service available all over America.

THE STUDEBAKER CORPORATION Truck Division SOUTH BEND, IND.

Studebaker **MOTOR TRUCKS**

FOREMOST IN TRANSPORT SINCE 1852

When writing to advertisers please mention Commercial Car Journal

MACK DIESEL

(CONTINUED FROM PAGE 44)

cylinder walls to lubricate the pin.

The American Bosch fuel injection pump is of a new flange-mounted type and is driven by a self-aligning coupling entirely enclosed in the housing. It is correctly timed at the factory. On the same shaft is the governor which prevents overspeeding. The injection pump is supplied by a Bosch transfer pump, there being one filter ahead of the transfer pump and two between it and the injection pump.

Connecting rods are oiled through rifle-drilled leads from the main bearings. The oil filter is built on to the engine. The filter element is of the cut-back type and the return oil is led down below the crankshaft level. Ventilation of the crankcase is through the tappet chamber and push-rod passages to the rocker arm chambers at the top of the engine, from where a two-part aluminum header connects with the air filter. Fresh air intake is through a filtered-type filler cap.

New Model ED—$675

The model ED priced at $675 f.o.b. factory, the new model has a gross vehicle weight rating of 8500 lbs. Chassis weight is 3100 lbs. leaving 5400 lb. for body and load. Standard tires are 6.00/17 on the front and single rear. Maximum tires at extra cost are 7.50/17 and 6.50/20 duals.

In appearance Model ED follows the same refined type of streamline styling offered on other light-capacity models. Offered in a standard wheelbase length of 120½ in., it accommodates 8-ft. body lengths and in the case of panel types, 9-ft. bodies. On the special wheelbase of 136½ in., 10-ft. regular bodies and 11-ft. panel bodies are accommodated.

It is powered by a 6 cylinder engine with bore and stroke of 3-3/16 in. by 4⅜ in., developing 67 hp. at 2800 r.p.m. Total piston displacement is 210 cu. in. Cylinders are cast in block with a one-piece head bolted down by 32 cylinder head studs. Valves are L-head type with exhaust valve seat inserts. Pistons are of nickel cast iron, tin-plated. Counterbalanced crankshaft has four main bearings.

Drive on the new model is from a dry 1-in. single-plate clutch through a heavy-duty truck-type three-speed selective transmission, built as a unit with the engine. Four speed transmission is available as an extra. Final drive is of the single reduction type, with full floating axle. Standard ratio is 5.571 with optional ratios of 5.125 and 6.333.

Four-wheel foot brakes are of the internal hydraulic type, with total braking area on all four wheels of 237 sq. in.

Chassis frame is of pressed carbon steel with side members 7 in. deep 3/16 in. thick with 2⅞ in. flange. There are five cross-members, three being of the box girder type and two of channel type.

Springs are 40½ in. by 2 in. in front, 51 by 2¼ in. in the rear and are suspended in rubber Shock Insulators, a feature found on no other make of truck. Two capacities of rear springs are supplied, one for trucks equipped with single rear tires, the other of larger capacity for trucks with dual rear tires.

YOUR PULSE TELLS MANY FACTS
. . to the Doctor
BOWSER
AKRAFLO
FUEL CONSUMPTION METER...
the pulse of the motor
TELLS ALL THE FACTS about FUEL CONSUMPTION . . . TO YOU
To know all about fuel consumption — to check drivers and motors — to secure valuable cost data— install AKRAFLO — the pulse of the motor. High accuracy . . . tamper-proof design and sturdy construction make it the ideal way to keep fuel costs down. Made in two models . . . for busses, trucks, taxis, etc. At its attractive price — you need it. Get full facts!
S. F. BOWSER & CO., Inc.
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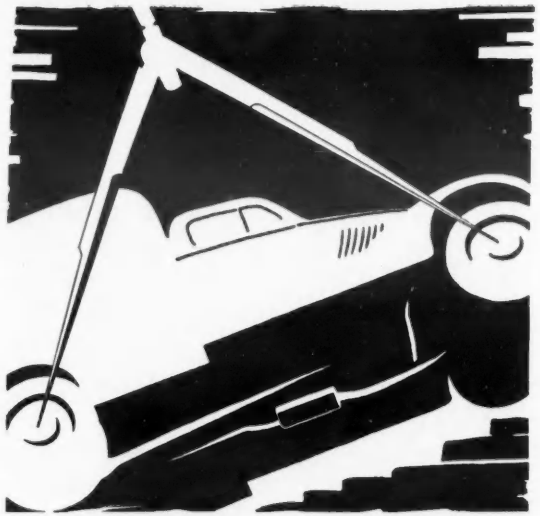
FORT WAYNE, INDIANA
TO CHECK FUEL CONSUMPTION ACCURATELY . . . . CHECK it at the MOTOR
MADE BY THE MAKERS OF
THE WORLD'S MOST WIDELY USED METER



COMMERCIAL CAR JOURNAL'S TRUCK SPECIFICATIONS Table

Brought up to date in this issue from data supplied by truck manufacturers

KEY TO ABBREVIATIONS AND REFERENCE MARKS

GENERAL

Make and Model—Only basic models are listed. Variations are available with most manufacturers.

Tonnage Rating—Where a spread of ratings is given the maximum ratings are for ideal operating conditions and the minimum for extremely difficult conditions; the ranges between are for varying operating conditions.

Chassis Price—Chassis price quoted applies to standard wheelbase with standard tires. All prices are F.O.B. factory.

Gross Vehicle Weight—Is chassis weight stripped, plus body and cab weight, plus payload. Gross vehicle weight is based on maximum recommended tire size, not on tires listed as standard.

Chassis Weight Stripped—Is weight of standard chassis with standard equipment, with crankcase and cooling system full, and 5 gal. of gasoline in tank. Does not include weight of cab. Exceptions are noted.

Maximum Tire Size—Is furnished at extra cost, if the maximum differs from the standard tire size. Dual rears are understood except where otherwise noted.

Maximum Brake H.P. at Given R.P.M.—Is actual dynamometer reading without accessories.

Gear Ratio Range in High—Ratios within the range given are available at no extra cost. Exceptions are noted.

Tractors—Unless given the designation N (meaning not available as tractor), all standard models may be assumed to be available as tractors.

(C)—Converted Ford or Chevrolet model, identifiable by the engine make listed.

(D)—Diesel equipped.

(N)—Not available as tractor.

(T)—Specifically designed for tractor use only.

c.f.—Cab-Forward.

c.o.e.—Cab-over-engine design.

e.b.s.—Engine-between-seat design

e.u.s.—Engine-under-seat design

(1) **Autocar**—Larger service brake areas on rear axles are provided when tires of 24" base are supplied.

(a) Price does not include auxiliary axle. Chassis weight includes auxiliary axle complete; area of brake lining and drum area do not include auxiliary rear axle.

(d) Models intended for dump or tractor service only.

(g) **Chevrolet**—Governor set not to exceed 45 M.P.H.

(2) **Ford**—Retail list price at Dearborn. Includes: Front Bumper with two Bumper Guards, five wheels, two 6.00/20 front tires, two 32x6 rear tires, spare wheel carrier and ash tray.

(3) **Ford**—Retail list price at Dearborn includes: front bumper with two bumper guards, five wheels, two 6.00/17 front tires, two 7.00/17 rear tires, spare wheel carrier, two front shock absorbers and ash tray.

(3a) **Ford**—Retail list price at Dearborn includes: front and rear bumpers, five wheels, five 6.00/16 tires, spare wheel carrier, tire lock, front and rear shock absorbers and ash tray.

(*) **Ford**—2-speed axle (Ratios 5.83 and 8.11) optional at extra cost.

(4) **General Motors**—Tire size indicated in column "Maximum Tire Size Furnished" is maximum capacity dual tires recommended for normal operating conditions. AC-300 to AC-851 and AF-300 to AF-850 inclusive are also available for export only as coach chassis. Dual performance rear axles are available on AC-300 to AC-700 and AF-300 to AF-700 inclusive. Double reduction rear axles are available on AC-450 to AC-700 and AF-450 to AF-700 inclusive. GMC "426" engine is available on AC-850 and AF-850.

(a) **Mack**—Weight in Chassis Weight column is shipping weight which includes weight of a chassis of medium standard wheelbase, cab, prevailing tire size and spare tire, ready for the road.

(6) **Reo**—Also available with four speed transmission and bevel gear rear axle.

(7) **Sterling**—Available with Diesel.

(•) **White**—Tractor rating only.

(9) **Willys**—Advertised list price less Federal tax, Cab Pick-up $530; Cab Stake $545; Panel Delivery $824. Prices, complete with shock absorbers and front and rear bumpers. Standard tires 6.00/16S–4 ply; 6.00/16S—6 ply-optional.

(10) **Indiana**—These models are for Government use and their chassis price depends upon quantity ordered.

(11) **Diamond T**—Weights given in Chassis Weight column are average chassis weights.

(12) **Available**—All models available in c.o.e. design.

(13) **White**—This is special model—price on application.

MAKES—ALL

A LaF—American La France.
B—Bendix. **BL**—Brown-Lipe.
Bu or Bud—Buda.
Cat—Caterpillar **Cl or Cla**—Clark.
C or Chev—Chevrolet.
Co—Covert. **Con**—Continental.
Cum—Cummins-Diesel
Eat—Eaton. **Fu**—Fuller.
F—Ford.
Her—Hercules. **L**—Lockheed.
LO—Lockheed front, Own rear
LW—Lockheed front, Wisconsin rear.
Lyc—Lycoming.
N.P.—New Process.
O or Ow—Own.
Op or Opt—Optional.
Sal—Salisbury
Shu—Shuler.
Spi—Spicer
T or Tim—Timken.
TO—Timken front, Own rear.
TW—Timken-Wisconsin
TWH—Timken Wisconsin Herrington
WG—Warner Gear.
WH—Wisconsin Herrington.
W-Hes—Waukesha Hesselman.
Wau—Waukesha.
W or Wis—Wisconsin
WO—Wagner front, Own rear.
Ws—Westinghouse.

BRAKES—SERVICE

Location

2—Two Wheels, rear only.
2/4—Two-wheel brakes effective on all four wheels through driveshaft.
4—Four Wheels, front and rear.
4r—Four Wheels, rear only.
6—Six Wheels, front and rear.

Type

I—Internal. X—External.

Operation

A—Air.
D—Hydraulic and mechanical.
H—Hydraulic.
M—Mechanical.
V—Vacuum.

BRAKES—HAND

Location

C—Center of double propeller shaft.
2—Rear wheels. 4—Four wheels.
6—Six wheels.
J—Jackshaft.
T—Transmission.
F—Driveshaft.
P—Propeller shaft.

Type

D—Tru-Stop disk.
I—Internal. X—External.

BRAKE DRUMS

Material

s—Cast alloy iron.
A—American Car Fdry.
C—Centrifuse. D—Dayton.
E—Ermalite. F—Furnace Iron.
G—Gunite. N—Nickel Iron.
p—Pressed steel. c—Cast iron.
s—Cast steel. P—Pressed steel.
(Where a combination of any of the above is used, the first reference mark applies to the front and the second to the rear drums.)

FRAME

Type

I—"I" Beam. C—Channel.
T—Channel tapered front and rear.
L—Channel reinforced with liner.
B—Channel reinforced with both liner and fishplate.
P—Channel reinforced with plate.
TL—Channel tapered front and rear reinforced with liner.
D—Drop Center.
Tf—Tapered front.
X—x-Braced.

GOVERNOR STANDARD

Y—Yes. N—No.

REAR AXLE

Final Drive and Type

B—Bevel. C—Chain.
D—Dead. F—Full-floating.
Hy—Hypoid d—Dual range axle.
2—Double Reduction.
S—Spiral bevel.
W—Worm.
½—Semi-floating.
¾—Three-quarter floating.
(*) Ratios other than standard at extra cost.
(**) Only one ratio.

Drive and Torque

A—Radius Rods and Torque Arm.
H—Hotchkiss. (springs)
R—Radius Rods
T—Torque Arm.
U—Torque Tube.

WHEELS DRIVEN

2F—Forward unit of Rear Axle Group.
2R—Rear Unit of Rear Axle Group.
4R—Forward and rear units of Rear Axle Group.
4F—Front Axle and Forward unit of Rear Axle Group.
4FR—Front axle and rear unit of rear axle group.
6—All wheels.

UNIVERSITY OF MICHIGAN LIBRARIES

Line Number	MAKE AND MODEL	GENERAL (See Keynote) Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight with Max. Tires	Chassis Wt. (Stripped)	TIRE SIZES D-dual rear S-single rear: Standard Front and Rear	Maximum Tire Size Furnished	ENGINE DETAILS: Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings: Number, Diameter and Length	Governor Standard	TRANSMISSION: Make and Model	Forward Sp'ds	REAR AXLE: Make and Model	Gear and Type	Drive & Torque	Gear Ratio Range in High	FRONT AXLE: Make and Model	BRAKES: SERVICE: Make Location Type Operat'n	Lining Area	Drum Area	Drum Material	Hand Location Type	C-A Dimension (Std. W. B.)	FRAME: Side Rail Dimensions	Type
1	Autocar.....(1) A	.....	1250	139	179	13500	4790	6.50/20D	8.25/20	Her JXB	6–3¾x4¼	263	5.8	184	73–2300	7–2½x10 H	Y	Cla 185F	4	Tim 54412	SF	H	** 6.8	Tim 31007	L4IHV	308	470	c	TD	62½	8x2¼x¼	T
2	.....B	.....	1625	139	179	16000	5150	6.50/20D	8.25/20	Her JXC	6–3¾x4¾	282	5.8	197	78–2300	7–2½x10 H	Y	Cla 200VO	5	Tim 56410	SF	H	** 6.8	Tim 31008	L4IHV	358	578	c	TD	62½	8x2¾x¼	T
3	.....(N) RM	.....	2280	164	212	18500	6715	7.50/20D	9.00/20	Own 315	6–3¾x4¾	315	5.5	210	78–2400	7–3x12½	Y	Own RL5	5	Own RL	2F	H	6.49–7.89	Tim 32502	LO4IDV	466	694	c	2I	84	8x2¾x¼	T
4	.....(N) RL	.....	2595	164	212	20000	6895	8.25/20D	9.00/20	Own 358	6–4x4¼	358	5.5	250	85–2300	7–3x12½	Y	Own RL5	5	Own RL	2F	H	6.49–7.89	Tim 32502	LO4IDV	466	694	c	2I	84	8 H x3x ½	T
5	.....RLS	.....	3025	164	200	25000	7400	9.75/20D	9.75/20	Own 358	6–4x4¼	358	5.5	250	85–2300	7–3x12½	Y	Own RL5	5	Own DA	2F	H	6.49–7.89	Tim 35000	LO4IDV	466	694	c	2I	84	8 H x3x ½	T
6	.....(N) D	.....	3600	164	182	25000	7565	9.00/20D	9.75/20	Own 358	6–4x4¼	358	5.5	250	85–2300	7–3x12½	Y	Own DF5	5	Own DFA	2F	H	6.49–7.89	Tim 35100	LO4IDV	580	930	c	2I	84	8 H x3x ½	T
7	.....(N) DF	.....	4200	164	182	26500	8445	9.75/20D	10.50/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14½	Y	Own DF5	5	Own N	2F	H	7.20–8.57	Tim 35100	LO4IDV	580	930	c	FD	84	9x3x¼	T
8	.....(N) N	.....	4500	164	218	28000	8705	9.75/20D	10.50/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14½	Y	Own DF5	5	Own TF	2F	H	7.20–8.57	Tim 26450	LO4IDV	580	930	c	FD	119½	9x3x¼	T
9	.....(N) NFS	.....	5600	195	195	26000	10380	10.50/20D	10.50/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14½	Y	Own TF5	5	Own TF	2F	H	7.20–8.57	Tim 35100	LO4IDV	580	930	c	FD	84	10½x3x¼	T
10	.....(N) NF	.....	5100	164	218	29500	9735	10.50/20D	10.50/24	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14½	Y	Own TF4	4	Own C	2F	R	7.20–9.43	Own SCH	O2IMV	502	930	c	FD	88½	9x3x¼	T
11	.....(N) CE	.....	6000	172	203	30000	10300	36x7D	36x7	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14½	Y	Own TF4	4	Own TG	2F	H	7.20–8.68	Tim 26452	TO4IA	659	1051	c	FD	129	10½x3x A	P
12	.....(N) TS	.....	6600	204	204	29740	11404	10.50/24D	10.50/24	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14½	Y	Own TF5	5	Own TG	2F	H	7.20–8.68	Tim 26452	TO4IA	631	930	c	FD	102	10½x3x¼	T
13	.....(N) T	.....	5850	182	218	36000	10485	10.50/20D	11.25/24	Own 501	6–4½x5¼	501	5.5	375	123–2200	7–3¼x14 H	Y	Own DF5	5	Own RL	2F	H	6.49–7.89	Tim 32502	LO4IDV	466	694	c	2I	62	8x2¾x¼	T
14	.....(T) RMT	.....	2490	142	164	28000	6835	8.25/20D	9.00/20	Own 315	6–3¾x4¾	315	5.5	210	78–2400	7–3x12½	Y	Own RL5	5	Own RL	2F	H	6.49–7.89	Tim 32502	LO4IDV	466	694	c	2I	62	8 H x3x ½	T
15	.....(T) 1TR	.....	2730	142	164	32000	6875	8.25/20D	9.00/20	Own 358	6–4x4¾	358	5.5	250	85–2300	7–3x12½	Y	Own RL5	5	Own RL	2F	H	6.49–7.89	Tim 32502	LO4IDV	466	694	c	2I	62	8 H x3x ½	T
16	.....(T) 2TR	.....	4100	142	164	36000	7805	9.00/20D	9.75/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14½	Y	Own DF5	5	Own TF	2F	H	6.49–7.89	Tim 32502	LO4IDV	567	831	c	2I	62	8 H x3x ½	T
17	.....(T) 3TR	.....	4800	148	164	40000	8375	9.75/20D	10.50/20	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14½	Y	Own DF5	5	Own TF	2F	H	7.20–8.57	Tim 32502	LO4IDV	567	831	c	FD	68	8 H x3x ½	T
18	.....(T) 4TR	.....	4950	148	164	45000	9265	9.75/20D	10.50/20	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14½	Y	Own TF5	5	Own TF	2F	H	7.20–8.57	Tim 35000	LO4IDV	567	831	c	FD	68	8 H x3x ½	T
19	.....(T) 5TR	.....	5700	148	164	50000	9655	10.50/20D	10.50/24	Own 501	6–4½x5¼	501	5.5	375	123–2200	7–3¼x14 H	Y	Own TF5	5	Own TG	2F	H	7.20–8.68	Tim 35100	TO4IA	580	930	c	FD	68	9x3x¼	T
20	.....(d) RLD	.....	2595	148	148	16000	6785	8.25/20D	9.00/20	Own 358	6–4x4¾	358	5.5	250	85–2300	7–3x12½	Y	Own RL5	5	Own RL	2F	H	6.49–7.89	Tim 32502	LO4IDV	466	694	c	2I	68	8 H x3x ½	T
21	.....(d) DP	.....	3750	148	164	18000	7635	9.00/20D	9.00/20	Own 358	6–4x4¾	358	5.5	250	85–2300	7–3x12½	Y	Own DF5	5	Own DFA	2F	H	7.13–7.89	Tim 35000	LO4IDV	567	831	c	2I	68	8 H x3x ½	T
22	.....(d) DH	.....	4550	148	164	23000	8535	9.75/20D	9.75/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14½	Y	Own DF5	5	Own TF	2F	H	7.20–8.57	Tim 35100	LO4IDV	580	930	c	2I	68	9x3x¼	T
23	.....(d) S	.....	5750	170	170	30000	10025	10.50/20D	10.50/24	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14½	Y	OwTF4-A3	12	Own CGA	2F	H	7.20–8.52	Tim 26452	LO4IDV	580	930	c	FD	90	10½x3x¼	T
24	.....(d) C	.....	6650	170	170	44000	11385	10.50/24D	11.25/24	Own 501	6–4½x5¼	501	5.5	375	123–2200	7–3¼x14 H	Y	OwTF4-A3	12	Tim 79733	2F	H	8.59–10.12	Tim 27452	LT4IDV	688	1050	c	FD	90	10½x3x A	T
25	.....(c.o.e.) UA	.....	1250	84	142	13500	4740	6.50/20D	8.25/20	Her JXB	6–3¾x4¼	263	5.8	184	73–2300	7–2½x10 H	Y	Cla 185F	4	Tim 54412	SF	H	** 6.8	Tim 31008	L4IHV	358	578	c	TD	62	8x2¼x¼	T
26	.....(c.o.e.) UB	.....	1690	84	142	16000	5290	7.00/20D	8.25/20	Her JXC	6–3¾x4¾	282	5.8	197	78–2300	7–2½x10 H	Y	Cla 200VO	5	Tim 56410	SF	H	** 6.8	Tim 32502	L4IHV	358	578	c	TD	62	8x2¾x¼	T
27	e.u.s. (N) UD	.....	3800	109	145	25000	7950	9.00/20D	9.75/20	Own 358	6–4x4¾	358	5.5	250	85–2300	7–3x12½	Y	Own UDF5	5	Own DA	2F	H	6.49–7.89	Tim 35100	LO4IDV	466	694	c	2I	84¼	8x3x¼	T
28	e.u.s. (N) UDF	.....	4550	109	145	26500	8540	9.75/20D	10.50/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14½	Y	Own UDF5	5	Own DFA	2F	H	6.49–7.89	Tim 26452	LO4IDV	580	930	c	2I	84¼	8x3x¼	T
29	e.u.s. (N) UN	.....	5000	109	163	28000	9030	9.75/20D	10.50/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14½	Y	Own UDF5	5	Own C & N	2F	H	7.20–8.57	Tim 26452	LO4IDV	580	930	c	FD	84¼	8x3x¼	T
30	e.u.s. (N) UNFS	.....	5600	145	145	27000	9585	10.50/20D	10.50/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14½	Y	Own UDF4	4	Own TF	2F	H	7.20–8.57	Tim 26452	B4IMV	637	930	c	FD	120¼	9x3x¼	T
31	e.u.s. (N) UNF	.....	5400	128	163	29500	9780	10.50/20D	10.50/24	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14½	Y	Own UTF5	5	Own TF	2F	H	7.20–8.57	Tim 26452	LO4IMV	580	930	c	FD	103¼	9x3x¼	T
32	e.u.s. (N) UTS	.....	6600	145	145	29900	10927	10.50/24D	10.50/24	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14½	Y	Own UTF4	4	Own TG	2F	H	7.20–8.68	Tim 26452	TO4IA	631	930	c	FD	120¼	10½x3x A	T
33	e.u.s. (N) UT	.....	5900	128	163	36000	10440	10.50/20D	10.50/24	Own 501	6–4½x5¼	501	5.5	375	123–2200	7–3¼x14 H	Y	Own UTF5	5	Own TG	2F	H	7.20–8.68	Tim 26452	TO4IA	631	930	c	FD	103¼	9x3x¼	T
34	e.u.s. (T) 1UTR	.....	3850	98	109	32000	7140	8.25/20D	9.75/20	Own 358	6–4x4¾	358	5.5	250	85–2300	7–3x12½	Y	Own UDF5	5	Own DA	2F	H	6.49–7.89	Tim 35000	LO4IDV	466	694	c	2I	73¼	8x3x¼	T
35	e.u.s. (T) 2UTR	.....	4650	98	109	36000	8750	9.00/20D	9.75/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14½	Y	Own UDF5	5	Own C	2F	H	7.20–9.43	Tim 35000	LO4IDV	567	831	c	2I	73¼	8x3x¼	T
36	e.u.s. (T) 3UTR	.....	5200	98	109	40000	8900	9.75/20D	10.50/20	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14½	Y	Own UDF5	5	Own C	2F	H	7.20–9.43	Tim 35000	LO4IDV	567	831	c	FD	73¼	8x3x¼	T
37	e.u.s. (T) 4UTR	.....	5450	98	109	45000	9200	9.75/20D	10.50/20	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14½	Y	Own UTF5	5	Own C	2F	H	7.20–9.43	Tim 26452	LO4IDV	580	930	c	FD	73¼	8x3x¼	T
38	e.u.s. (T) 5UTR	.....	5900	98	109	50000	9790	10.50/20D	10.50/24	Own 501	6–4½x5¼	501	5.5	375	123–2200	7–3¼x14 H	Y	Own UTF5	5	Own CG	2F	H	7.69–8.52	Tim 26452	TO4IA	631	930	c	FD	73¼	9x3x¼	T
39	e.u.s. (d) UDP	.....	4400	100	100	23000	8410	9.00/20D	9.75/20	Own 358	6–4x4¾	358	5.5	250	85–2300	7–3x12½	Y	Own UDF5	5	Own C	2F	H	7.20–9.43	Tim 26452	LO4IDV	580	930	c	2I	75¼	8x3x¼	T
40	e.u.s. (d) US	.....	5850	120	120	31000	10240	10.50/20D	10.50/24	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14½	Y	Fu	5	Own CGA	2F	H	7.69–8.52	Tim 26452	LO4IDV	580	930	c	FD	95¼	9x3x¼	T
♦ 41	Avail- (12) P-105	¾–1	1035	Op	Op	8500	2425	6.50/18S	6.50/20	Wau FC	4–3¼x4	133	5.8	98	36–2800	3–2½x4	N	WG T9	4	Tim 53508	SF	H	**–6.6	Tim 30000H	L4IH	266	427	a	TX	Opt	4x2x¼	T
42	able.....X-110	1½–4	1385	Op	Op	11500	3600	6.50/20D	7.50/20	Wau ZKA	6–3½x4½	221	5.6	154	66–2900	4–2½x5½	N	WG T9	4	Tim 53308	SF	H	**–6.6	Tim 30000H	L4IH	266	427	a	TX	Opt	8x3x¼	T
♦ 43	.....X-120	2–4½	1575	Op	Op	12500	4000	6.50/20D	7.50/20	Wau ZKA	6–3½x4½	221	5.6	154	66–2900	4–2½x5½	N	WG T9	4	Tim 53308	SF	H	**–6.6	Tim 30000H	L4IH	303	503	a	TX	Opt	10x3x¼	T
♦ 44	.....X-140	2–5	1640	Op	Op	14000	4300	7.00/20D	7.00/20	Wau BJ	6–3½x4½	245	5.7	165	73–3000	7–2½x10¼	N	WG T9	4	Tim 53308	SF	H	**–6.6	Tim 31000H	L4IH	303	503	a	TX	Opt	10x3x¼	T
♦ 45	.....X-170	2½–5½	1840	Op	Op	16000	4800	7.50/20D	8.25/20	Wau BM	6–3½x4¾	263	5.4	165	78–3100	7–2½x10¼	N	WG T9	4	Tim 54411	SF	H	**–6.8	Tim 31000H	L4IH	330	582	a	TX	Opt	10x3x¼	T
♦ 46	.....X-220	3–6	1930	Op	Op	17000	5650	7.50/20D	8.25/20	Wau BK	6–3½x4¾	282	5.4	188	85–3200	7–2½x10¼	Y	Spi 2341	4	Tim 54411	SF	H	**–6.8	Tim 32502H	L4IH	330	582	a	TX	Opt	10x3x¼	T
♦ 47	.....X-250	3½–7	2230	Op	Op	19000	5500	8.25/20D	9.00/20	Wau BZ	6–4x4¼	320	5.7	210	86–2800	7–2½x10¼	N	Spi 2341	4	Tim 56410	SF	R	**–7.4	Tim 32502H	L4IH	330	582	a	TX	Opt	12x3x¼	T
♦ 48	.....X-280	4–8	2600	Op	Op	21000	6200	9.00/20D	9.00/20	Wau BZ	6–4x4¼	320	5.7	210	86–2800	7–2½x10¼	N	Fu 5A330	5	Tim 58305	SF	R	**–7.8	Tim 33000A	L4IH	376	660	a	TX	Opt	12x3x¼	T
♦ 49	.....X-310	4½–8	3050	Op	Op	21000	7000	9.00/20D	9.75/20	Wau MZR	6–4¼x4½	404	5.7	285	96–2400	7–2½x12½	Y	Fu 5-A-430	5	Tim 58305	SF	R	**–7.8	Tim 35000H	L4IH	376	660	a	TD	Opt	12x3x¼	T
♦ 50	.....X-410	5–10	3940	Op	Op	26500	8200	9.75/20D	9.75/20	Wau SRKR	6–4½x5½	517	5.0	365	126–2300	7–3x13⅜	Y	Fu 5-A-620	5	Tim 65725H	WF	R	**–8.50	Tim 35000H	L4IHV	462	768	a	TD	Opt	14x3x A	T
♦ 51	Bantam.....	¼	349	75	75	1700	850	5.00/15D	.....	Own	4–2.2x3	45	6.1	...	20–4000	2–2½x2½	N	WG	3	Spi	S	H	**–5.87	Spi 10	O4IM	76	104	P	4I	75	8x2 A x .109	.....
52	Brockway.....78	1½–2	895	138	164	.....	3965	6.00/20D	32x6	Con 24B	6–3 A x4¾	210	5.7	154	71–3100	4–2¼x6	N	WG T9	4	Tim 53521H	SF	H	5.66–6.6	Tim 30000H	L4IH	255	402	a	TX	65 A	7 H x3x ½	T
53	83	1½–2½	1195	138	170	.....	4100	6.50/20D	7.50/20	Con 25B	6–3 A x4¾	244	5.7	171	84–3250	4–2⅝x6⅜	N	WG T9	4	Tim 53521H	SF	H	5.66–6.6	Tim 30000H	L4IHV	255	402	a	TX	65 A	7 H x3x ½	T
54	87	2–2½	1240	144	176	.....	4435	6.50/20D	7.50/20	Con 28B	6–3 A x4¾	248	5.7	170	78–3100	7–2⅝x10 A	N	WG T9	4	Tim 53521H	SF	H	5.66–6.6	Tim 30000H	L4IHV	255	402	a	TX	71 A	7 H x3x ½	T
55	88	1½–3	1290	150	176	.....	4500	6.50/20D	7.50/20	Con 25B	6–3 A x4¾	244	5.7	171	84–3250	4–2⅝x6⅜	N	WG T9	4	Tim 53307H	SF	H	5.2 –5.8	Tim 30000H	L4IHV	310	477	a	TX	71 A	7 H x3x ½	T
56	.....90X	2½–3	1470	150	176	.....	4635	7.00/20D	34x7	Con 28B	6–3 A x4¾	248	5.3	170	78–3100	7–2⅝x10 A	N	WG T9	4	Tim 53307H	SF	H	5.83–6.8	Tim 31000H	L4IHV	302	525	a	TX	71 A	7 H x3x ½	T
57	92	1½–4	1560	150	188	.....	4700	7.00/20D	8.25/20	Con 25B	6–3 A x4¾	244	5.7	171	84–3250	4–2⅝x6⅜	N	WG T9	4	Tim 54411H	SF	H	5.83–6.8	Tim 31000H	L4IHV	329	580	a	CD	83 A	8x3x¼	T
58	94	1½–5	1850	156	188	.....	5050	7.50/20D	8.25/20	Con 25B	6–3 A x4¾	244	5.7	171	84–3250	4–2⅝x6⅜	N	BL B341	4	Tim 53307H	SF	H	5.83–6.8	Tim 31000H	L4IHV	302	528	a	CD	83 A	7 H x3x ½	T
59	96	2½–3	1740	156	176	.....	5150	7.00/20D	8.25/20	Con 29B	6–3 A x4¾	288	5.4	192	78–2650	7–2⅝x13	N	BL B341	4	Tim 54411H	SF	H	5.83–6.8	Tim 31000H	L4IHV	329	580	a	CD	83 A	8x3x¼	T
60	110	3	1900	156	188	.....	5490	7.50/20D	8.25/20	Con 29B	6–3 A x4¾	288	5.4	192	78–2650	7–2⅝x13	N	BL B341	4	Tim 54411H	SF	H	5.83–6.8	Tim 31000H	L4IHV	329	580	a	CD	83 A	8x3x¼	T
61	112	3	1710	150	188	.....	.....	7.00/20D	8.25/20	Con 38B	6–3 A x4¾	290	5.6	205	87–2800	7–2⅝x12	N	BL B341	4	Tim 54411H	SF	H	5.83–6.8	Tim 31000H	L4IHV	329	580	a	CD	77 A	8x3x¼	T
62	.....125X	3	2075	164	188	.....	5570	7.50/20D	8.25/20	Con 31B	6–3 A x4¾	318	5.5	214	86–2600	7–2⅝x13	N	BL B341	4	Tim 54411H	SF	H	5.83–6.8	Tim 31000H	L4IHV	329	580	a	CD	91 A	8x3x¼	T
63	128	3½–4	1950	156	188	.....	.....	7.50/20D	8.25/20	Con 38B	6–3 A x4¾	290	5.6	205	87–2800	7–2⅝x12	N	BL B341	4	Tim 56410H	SF	H	5.71–7.4	Tim 31000H	L4IHV	329	580	a	CD	83 A	8x3x¼	T
64	130	3½–4	2245	164	206	.....	6270	8.25/20D	9.00/20	Con 29B	6–3 H x4½	288	5.4	192	78–2650	7–2⅝x13	N	BL B341	4	Tim 56410H	SF	R	6.16–7.4	Tim 32505H	L4IHV	329	580	a	CD	91 A	8x3x¼	T
65	145	3½–4	2385	176	206	.....	6390	8.25/20D	9.00/20	Con 31B	6–3 A x4½	318	5.5	214	86–2600	7–2⅝x13	N	BL B341	4	Tim 56410H	SF	R	6.16–7.4	Tim 32505H	L4IHV	329	580	a	CD	103 A	8x3x¼	T
66	.....150X-4	4	2680	176	206	.....	6520	8.25/20D	9.00/20	Con 32B	6–4 H x4½	361	5.4	252	95–2500	7–2⅝x13	Y	BL 3241	4	Tim 56410H	SF	R	5.71–7.4	Tim 32505H	L4IHV	329	580	a	CD	103 A	8x3x¼	T
67	.....150X-5	4	2710	176	206	.....	6570	8.25/20D	9.00/20	Con 32B	6–4 H x4½	361	5.4	252	95–2500	7–2⅝x13	Y	Fu 5-A-43	5	Tim 56410H	SF	R	5.71–7.4	Tim 32505H	L4IHV	329	580	a	CD	103 A	8x3x¼	T
68	120	2½–3	2260	156	188	.....	5800	7.50/20D	8.25/20	Con 30B	6–4x4½	311	4.2	203	85–2500	7–2¾x13 A	N	BL 314	4	Tim 54300H	SF	H	4.86–5.83	Tim 32505H	L4IHV	329	580	a	CD	69	8x3x¼	T
69	140	3–3½	2850	156	206	.....	6385	8.25/20D	9.00/20	Con 30B	6–4x4½	311	4.2	203	85–2500	7–2¾x13 A	Y	BL 314	4	Wis 5000L	2F	H	6.00–7.35	Tim 32505H	L4IHV	329	580	a	CD	69	8x3x¼	T
70	141	3½–4	3355	170	200	.....	7450	9.00/20D	9.75/22	Con 30B	6–4x4½	311	4.2	203	85–2500	7–2¾x13 A	Y	BL 314	4	Wis 72000	2F	R	6.28–8.00	Shu 15685B1	L4IHV	396	663	a	CD	83	8x3x¼	T
71	.....130-PS	4–4½	2525	164	206	.....	6250	34x7D	9.00/20	Con 29-B	6–3 H x4½	288	5.4	192	78–2650	7–2⅝x13	N	Fu 5-A-43	5	Tim 56200H	SF	R	6.16–7.4	Tim 32505H	L4IHV	329	580	a	CD	91 A	8x3x¼	T
72	.....160X	4–5	3295	153	219	.....	7350	9.00/20D	9.75/22	Con 32B	6–4 H x4½	361	5.4	252	95–2500	7–2⅝x13	Y	Fu 5-A-43	5	Tim 58205H	SF	R	6.16–7.4	Shu 15685B1	L4IHV	396	663	a	CD	83 A	8 H x3x A	T
73	.....170X	4–5	3640	153	219	.....	7960	9.00/20D	9.75/22	Con 33B	6–4 H x4½	381	4.4	276	106–2600	7–2¾x13 A	Y	Fu 5-A-62	5	Wis 72000	2F	R	6.00–8.40	Shu 15685B1	L4IHV	396	663	a	CD	83 A	8 H x3x A	T
74	.....165X	5–7	3795	153	219	.....	8150	9.75/20D	10.50/22	Con 32B	6–4 H x4½	361	5.4	252	95–2500	7–2⅝x13	Y	Fu 5-A-43	5	Wis 1337BH	2F	R	5.63–8.59	Shu 15685B1	L4IHV	484	772	a	CD	83 A	8 H x3x A	T
75	.....175X	5–7½	4290	153	219	.....	8550	9.00/20D	10.50/22	Con 34B	6–4 H x4½	427	4.2	308	118–2600	7–2¾x13 A	Y	Fu 5-A-62	5	Wis 1337BH	2F	R	5.63–8.59	Shu 15685B1	L4IHV	484	772	a	CD	83 A	8 H x3x A	T
76	.....195X	5–7½	4230	153	219	.....	8650	9.75/20D	10.50/22	Con 33B	6–4 H x4½	381	4.4	276	106–2600	7–2¾x13 A	Y	Fu 5-A-62	5	Wis 1337BH	2F	R	5.63–8.59	Shu 15685B1	L4IHV	484	772	a	CD	83 A	8 H x3x A	T
77	.....220X	7½–10	4930	153	219	.....	9050	10.50/20D	11.25/24	Con 34B	6–4 H x4½	427	4.2	308	118–2600	7–2¾x13 A	Y	Fu 5-A-62	5	Wis 1337BH	2F	R	5.63–8.59	Shu 15685B1	L4IHV	484	772	a	CD	83 A	8 H x3x A	T
78	.....240X	6–7½	5130	153	219	.....	8590	9.75/20D	10.50/24	Con 35B	6–4½x5¼	501	4.3	364	135–2200	7–2¾x13 A	Y	Fu 5-A-62	5	Wis 1757H	2F	R	6.42–8.5	Shu 15685B1	L4IHV	531	899	a	CD	83 A	8 H x3x A	T
79	.....260X	10	6030	195	219	.....	9720	10.50/22D	11.25/24	Con 35B	6–4½x5¼	501	4.3	364	135–2200	7–2¾x13 A	Y	Fu MHU	4	Wis 1757H	2F	R	6.42–8.5	Shu 15695B1	L w4IDV	600	899	a	CD	125 A	8 H x3x A	T
80	.....260S	10	6380	195	219	.....	10000	10.50/24D	11.25/24	Con 35B	6–4½x5¼	501	4.3	364	135–2200	7–2¾x13 A	Y	Fu MHU	4	Wis 1757H	2F	R	6.42–8.5	Shu 15695B1	Ww4IA	560	867	a	CD	68	10x3x A	T
81	.....V-1200	15	10500	156	240	.....	12400	11.25/22D	11.25/24	A LaF V12	12–4x5	753	5.1	505	240–2800	4–3½x9¼	Y	BL 7351	5	Wis 1910W	2F	R	7.16–10.0	Tim 27452A1	Ww4IA	560	867	a	CD	68	10x3x A	T
♦ 82	Chev.– (2) Mas. JE	½	499	113	133	4900	2249	6.00/16S	16–6	Own	6–3 ½x3 ⅛	216	6.2	170	78–3200	4–2¼x5 A	N	Own	3	Own	3½	U	4.11*3.82	Own	O4IH	158	288	a	2I	38¼	8¼x2¼x¼ A	C
♦ 83	Trks (2) Mas. JG	½	528	133	133	5200	2410	16–8	16–6	Own	6–3 ½x3 ⅛	216	6.2	170	78–3200	4–2¼x5 A	N	Own	3	Own	3½	U	4.11–4.11	Own	O4IH	158	288	a	2I	48¼	8¼x2¼x¼ A	C
84	.... (2) Mas. JE	¾

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Line Number	MAKE AND MODEL	GENERAL (See Keynote) Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W.B. Furnished	Gross Vehicle Weight with Max. Tires	Chassis Wt. (Stripped)	TIRE SIZES D-dual rear S-single rear: Standard Front and Rear	TIRE SIZES: Maximum Tire Size Furnished	ENGINE DETAILS: Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings: Number, Diameter and Length	Governor Standard	TRANSMISSION: Make and Model	Forward Spd's	REAR AXLE: Make and Model	Gear and Type	Drive & Torque	Gear Ratio Range in High	FRONT AXLE: Make and Model	BRAKES: SERVICE Make Location Type Operat'n	Lining Area	Drum Area	Drum Material	Hand Location Type	C-A Dimension (Std. W. B.)	FRAME: Side Rail Dimensions	Type
	Fargo—Cont.																														
1	(E) FXHD-4		957	182	182	13500		7.50/20D	7.50/20	Own	6–3¾x4¼	228	5.8	158	78–3000	4–2½x5½	N	NP 36760	4	Own	SF	H	5.10–6.30	Own	O4IH	262	406	A	TX		8½x2½	x¼
2	(E) FXH-6		1186	136	220	16850		34x7D	34x7	Own	6–3¾x4½	242	5.6	175	85–3000	4–2½x5½	Y	Cla 200V	5	Own	HyF	H	5.10–7.10	Own	O41HV	321	502	A	TX	60	8½x2½	x⅜ CX
3	(E) FH-1		472	116	116	4000		6.00/16S	6.50/168	Own	6–3¼x4½	201	6.7	148	70–3000	4–2¼x5½	N	NP 36700	3	Own	Hy	H	3.70–4.78	Own	O41H	148	251	C	TX	40	6x2x⅛	C
4	(E) FH-15		542	120	120	5000		7.00/16††S	7.00/158	Own	6–3¼x3½	217	6.5	158	77–3000	4–2½x5½	N	NP 36700	3	Own	Hy	H	3.70–4.78	Own	O41H	154	264	C	TX	44	6½x2x⅜	C
5	(E) FH-2		587	120	133	6000		7.00/16††S	7.50/168	Own	6–3¼x3½	217	6.5	158	77–3000	4–2½x5½	N	NP 36710	3	Own	Sl	H	3.90–4.78	Own	O41H	190	293	A	TX	44	6½x2½x⅜	C
6	(E) FH-3		597	126	160	10000		6.00/20†8	32x6	Own	6–3¾x4⅛	218	5.8	150	73–3000	4–2½x5½	N	NP 36750	4	Own	SF	H	4.80–5.80	Own	O41H	190	310	A	TX	51⅛	6½x2½x⅜	CX
7	(E) FH-4		637	126	190	12000		6.00/20†8	32x6	Own	6–3¾x4½	228	5.8	158	78–3000	4–2½x5½	N	NP 36760	4	Own	SF	H	5.10–6.30	Own	O41H	262	406	A	TX	51⅛	7x2½x⅜	CX
8	(E) FHD-4		937	182	182	12000		7.50/20D	7.50/20	Own	6–3¾x4¼	228	5.8	158	78–3000	4–2½x5½	N	NP 36760	4	Own	SF	H	5.10–6.30	Own	O41H	262	406	A	TX		8½x2½	x¾
9	(E) FH-6		992	136	220	14000		7.00/20D	34x7	Own	6–3¾x4½	242	5.6	175	85–3000	4–2½x5½	Y	Cla 200V	5	Own	HyF	H	5.10–7.10	Own	O41HV	321	502	A	TX	60	8½x2½	x⅜ CX
10	(D) (E) FGZ-6		2468	133	220	15000		7.00/20D	34x7	Her DJXC	6–3¾x4½	298	14	178	77–2600	7–3x8½	Y	Cla 200V	5	Own	SF	H	5.10–6.30	Own	O41HV	321	502	A	TX	57½	8½x2½	x⅜ CX
11	Federal 9	¾–1	695	105	121		2850	6.00/20S	6.00/20	Con F4140	4–3⅛x4⅜	140	6.0	107	52–2500	3–2¼x4½	N	WG T9	4	Tim 53503H	SF	H	5.14–7.20	Tim 30020H	L41H	261	388	a	TX	35¾	6½x2⅛x⅛	T
12	11	1½–2	655	127	164		3450	6.00/20S	7.00/20	Her QXB3	6–3¼x4½	205	5.2	143	65–3500	7–2½x10⅛	N	WG T9	4	Tim 53503H	SF	H	5.14–6.20	Tim 30020H	L41H	261	388	a	TX	51⅝	7x2⅛x⅜	T
13	12	1½–2	680	127	164		3450	6.00/20S	7.50/20	Her QXC3	6–3½x4½	221	5.5	154	70–3500	7–2½x10⅛	N	WG T9	4	Tim 53503H	SF	H	5.14–6.20	Tim 30020H	L41H	261	388	a	TX	51⅝	7x2⅛x⅜	T
14	14	1½–2½	735	127	164		3500	6.00/20S	7.50/20	Her QXC3	6–3½x4½	221	5.5	154	70–3500	7–2½x10⅛	N	WG T9	4	Tim 53521H	SF	H	5.14–6.66	Tim 30020H	L41H	255	402	a	TX	51⅝	7x2⅛x⅜	T
15	15	1½–3	795	135	250		4230	6.00/20†8	7.50/20	Her JXA	6–3½x4¼	228	5.2	155	70–2800	7–2½x10⅛	Y	WG T9	4	Tim 53308H	SF	H	5.14–6.66	Tim 30000H	L41H	299	478	a	TX	56⅜	8½x2⅛x¼	T
16	18	2–3½	945	135	250		4350	6.00/20D	8.25/20	Her JXB	6–3½x4¼	263	5.4	183	80–2800	7–2½x10⅛	Y	WG T9	4	Tim 53308H	SF	H	5.14–6.66	Tim 30003H	L41HV	302	528	a	TX	56¾	8½x2½x¼	T
17	20	2–4	1150	135	250		4850	6.50/20D	8.25/20	Her JXB	6–3½x4¼	263	5.4	183	80–2800	7–2½x10⅛	Y	WG T9	4	Tim 54411H	SF	H	5.83–6.80	Tim 31000H	L41HV	330	578	a	TX	56¾	8½x2½x¼	T
18	25	2½–4½	1450	135	250		5550	7.00/20D	9.00/20	Her JXC	6–3½x4¼	282	5.6	195	85–2800	7–2½x10⅛	Y	Cla 185F	4	Tim 55411H	SF	H	5.71–7.40	Tim 31000H	L41HV	330	578	a	TX	56¾	8½x2½x¼	T
19	29	3–5	1850	135	250		5660	7.50/20D	9.75/20	Her JXD	6–4x4¼	320	5.4	225	95–2800	7–2½x10⅛	Y	Cla 205V	5	Tim 56411H	SF	H	6.16–7.40	Tim 32501H	L41HV	415	735	a	TX	56¾	8½x2½x¼	T
20	29H	3–5½	2080	135	250		6000	8.25/20D	9.75/20	Her JXD	6–4x4¼	320	5.4	225	95–2800	7–2½x10⅛	Y	Cla 205V	5	Tim 58301H	SF	H	6.83–7.80	Tim 32501H	L41HV	504	844	a	TX	56¾	8½x2½x¼	T
21	40	4–6	2800	135	250		7200	9.00/20D	10.50/20	Wau 6MK	6–4¼x4⅜	381	6.1	273	98–2400	7–2⅝x12½	Y	Cla 270V	5	Tim 58301H	SF	H	5.57–7.80	Tim 33000H	L41HV	504	844	a	TX	60	10½x3½x⅛	T
22	50	5–6½	3375	135	250		7900	9.00/20D	10.50/20	Wau 6MZ	6–4¼x4¾	404	5.4	292	105–2400	7–2⅝x12½	Y	Cla 270V	5	Tim 75733H	2F	R	6.85–9.41	Tim 35011H	L41HV	504	844	a	FD	60	10½x3½x⅛	T
23	50H	5–7½	3855	135	250		8300	9.75/20D	10.50/20	Wau 6MZ	6–4¼x4¾	404	5.4	292	105–2400	7–2⅝x12½	Y	Cla 270V	5	Tim 76736H	2F	R	7.35–9.20	Tim 35011H	L41HV	504	844	a	FD	60	10½x3½x⅛	T
24	62	6–7½	5675	141	211		10400	10.50/20D	11.25/24	Con 22R	6–4½x5¼	501	4.5	265	138–2400	7–2¾x14½	Y	Cla 326VO	5	Tim 76746W	2F	R	7.89–9.20	Tim36000TW	Ws41A	620	921	a	TD	60	10⅛x3½x⅜	TF
25	63	6–7½	5675	141	211		10250	10.50/20D	11.25/24	Wau 6SRK	6–4¾x5½	517	4.6	350	115–2400	7–3x13½	Y	Cla 326VO	5	Tim 76746W	2F	R	7.89–9.20	Tim36000TW	Ws41A	620	921	a	TD	60	10⅛x3½x⅜	TF
26	65	6–8	6425	141	211		11300	10.50/24D	11.25/24	Con 22R	6–4½x5¼	501	4.5	365	138–2400	7–2¾x14½	Y	Cla 326VO	5	Tim 79733W	2F	R	8.59–10.11	Tim36000TW	Ws41A	724	1051	a	TD	60	10⅛x3½x⅜	TF
27	66	6–8	6425	141	211		11150	10.50/24D	11.25/24	Wau 6SRK	6–4¾x5½	517	4.6	350	115–2400	7–3x13½	Y	Cla 326VO	5	Tim 79733W	2F	R	8.59–10.11	Tim36000TW	Ws41A	724	1051	a	TD	60	10⅛x3½x⅜	TF
28	(c.o.e.) 75	1½–3	930	104	215		4280	6.00/20†8	7.50/20	Her JXA	6–3½x4¼	228	5.2	155	70–2800	7–2½x10⅛	Y	WG T9	4	Tim 53308H	SF	H	5.14–6.66	Tim 31100H	L41H	299	478	a	TX	60	8½x2½x¼	T
29	(c.o.e.) 80	2–4	1260	104	215		4900	6.50/20D	8.25/20	Her JXB	6–3½x4¼	263	5.4	183	80–2800	7–2½x10⅛	Y	WG T9	4	Tim 54411H	SF	H	5.83–6.80	Tim 31102H	L41HV	330	578	a	TX	60	8½x2½x¼	T
30	(c.o.e.) 85	2½–4½	1565	104	215		5600	7.00/20D	9.00/20	Her JXC	6–3½x4¼	282	5.6	195	85–2800	7–2½x10⅛	Y	Cla 185F	4	Tim 55411H	SF	H	5.71–7.40	Tim 32502H	L41HV	330	578	a	TX	60	8½x2½x¼	T
31	(c.o.e.) 89	3–5	1945	104	215		5720	7.50/20D	9.75/20	Her JXD	6–4x4¼	320	5.4	225	95–2800	7–2½x10⅛	Y	Cla 205V	5	Tim 56411H	SF	H	6.16–7.40	Tim 32502H	L41HV	415	735	a	TX	60	8½x2½x¼	T
32	(c.o.e.) 89H	3–5½	2175	104	215		6050	8.25/20D	9.75/20	Her JXD	6–4x4¼	320	5.4	225	95–2800	7–2½x10⅛	Y	Cla 205V	5	Tim 58301H	SF	H	6.83–7.80	Tim 32502H	L41HV	504	844	a	TX	60	8½x2½x¼	T
33	Ford 91T	1½	580	134			3200	6.00/20†8	7.50/20	Own	8–3⅛x3¾	221		150	85–3800	3–2.5x4.7	N	Own	4	Own	FS	U	5.14–6.67*	Own	O4IH	346	506	a	2I	60	7x2¾x.21	C
34	99T	1½	605	134			3210	6.00/20†8	7.50/20	Own	8–3⅛x3¾	239		170	95–3600	3–2.5x4.7	N	Own	4	Own	FS	U	5.14–6.67*	Own	O4IH	346	506	a	2I	60	7x2¾x.21	C
35	917T	1½	605	157	191		3260	6.00/20†8	7.50/20	Own	8–3⅛x3¾	221		150	85–3800	3–2.5x4.7	N	Own	4	Own	FS	U	5.14–6.67*	Own	O4IH	346	506	a	2I	83	7x2¾x.21	C
36	997T	1½	630	157	191		3270	6.00/20†8	7.50/20	Own	8–3⅛x3¾	239		170	95–3600	3–2.5x4.7	N	Own	4	Own	FS	U	5.14–6.67*	Own	O4IH	346	506	a	2I	83	7x2¾x.21	C
37	911W	1½	770	101			3250	6.00/20†8	7.50/20	Own	8–3⅛x3¾	221		150	85–3800	3–2.5x4.7	N	Own	4	Own	FS	U	5.14–6.67*	Own	O4IH	346	506	a	2I	60	7x2¾x.21	C
38	991W	1½	795	101			3260	6.00/20†8	7.50/20	Own	8–3⅛x3¾	239		170	95–3600	3–2.5x4.7	N	Own	4	Own	FS	U	5.14–6.67*	Own	O4IH	346	506	a	2I	60	7x2¾x.21	C
39	(c.o.e.) 91W	1½	795	134			3320	6.00/20†8	7.50/20	Own	8–3⅛x3¾	221		150	85–3800	3–2.5x4.7	N	Own	4	Own	FS	U	5.14–6.67*	Own	O4IH	346	506	a	2I	93	7x2¾x.21	C
40	(c.o.e.) 99W	1½	820	134			3330	6.00/20†8	7.50/20	Own	8–3⅛x3¾	239		170	95–3600	3–2.5x4.7	N	Own	4	Own	FS	U	5.14–6.67*	Own	O4IH	346	506	a	2I	93	7x2¾x.21	C
41	(c.o.e.) 917W	1½	820	157			3390	6.00/20†8	7.50/20	Own	8–3⅛x3¾	221		150	85–3800	3–2.5x4.7	N	Own	4	Own	FS	U	5.14–6.67*	Own	O4IH	346	506	a	2I	116	7x2¾x.21	C
42	(c.o.e.) 997W	1½	845	157			3400	6.00/20†8	7.50/20	Own	8–3⅛x3¾	239		170	95–3600	3–2.5x4.7	N	Own	4	Own	FS	U	5.14–6.67*	Own	O4IH	346	506	a	2I	116	7x2¾x.21	C
43	92Y	1	535	122			2485	6.00/17†8	7.50/17	Own	8–2.6x3.2	136		94	60–3500	3–2x4.33	N	Own	3	Own	FS	U	**–4.67	Own	O4IH	201	308	a	2I	48	6x2¼x.19	C
44	91Y	1	550	122			2670	6.00/17†8	7.50/17	Own	8–3⅛x3¾	221		150	85–3800	3–2.5x4.7	N	Own	3	Own	FS	U	**–4.86	Own	O4IH	201	308	a	2I	48	6x2¼x.19	C
45	922C		445	112			1900	6.00/16S	6.50/16	Own	8–2.6x3.2	136		94	60–3500	3–2x4.33	N	Own	3	Own	S¼	U	4.11–4.44	Own	O4IH	162	264	a	2I	38	5½x2x.11	Tlx
46	91C		460	112			2085	6.00/16S	6.50/16	Own	8–3⅛x3¾	221		150	85–3800	3–2.5x4.7	N	Own	3	Own	S¼	U	3.78–4.11	Own	O4IH	162	264	a	2I	38	5½x2x.11	Tlx
47	General (4) AC-100	½	460	113	123		2390	6.00/16S	15–7.508	Own 228	6–3⅞x3½	228	6.2			4–2⅜x4½	N	Own	3	Own	S½	U	**–4.11	Own	O4IH	168	242	e	2I	38¼	5½x2¼x⅛	C
48	Motors AC-150	¾	535	123	...		2560	7.00/16S	15–7.508	Own 228	6–3⅞x3½	228	6.2			4–2⅜x4½	N	Own	3	Own	S½	U	**–4.11	Own	O4IH	168	242	e	2I	48½	5½x2¼x⅛	C
49	AC-251	1–1½	550	113			2815	7.00/16S	7.00/16	Own 228	6–3⅞x3½	228	6.2			4–2⅜x4½	N	Own	3	Own	SF	H	4.57–5.14	Own	O4IH	200	297	eC	2I	37¾	6½x2½x⅛	T
50	AC-252	1–1½	555	133			2870	7.00/16S	7.00/16	Own 228	6–3⅞x3½	228	6.2			4–2⅜x4½	N	Own	3	Own	SF	H	4.57–5.14	Own	O4IH	200	297	eC	2I	57¾	6½x2½x⅛	T
51	AC-300	1½–3½	575	133	158		3570	6.00/20†8	8.25/20	Own 228	6–3⅞x3½	228	6.2	180	80–3000	4–2⅜x4½	N	Own	4	Own	SF	H	5.67–6.20	Own	O4IH	337	478	C	2I	57¾	7x2½x⅛	T
52	AC-350	1½–4	795	133	193		4270	6.00/20†8	8.25/20	Own 228	6–3⅞x3½	228	6.2	180	80–3000	4–2⅜x4½	N	Own	4	Own	SF	H	5.67–6.67	Own	O4IH	337	478	C	2I	60	8x2½x⅛	T
53	AC-400	1½–4½	950	133	193		4450	6.00/20D	34x7	Own 248	6–3⅞x3½	248	6.2	196	88–3000	4–2⅜x4½	Y	Own	4	Own	SF	H	5.67–6.67	Own	O41HV	340	483	CN	TX	60	8¼x3x¼	T
54	AC-450	1½–5	1125	133	193		4835	6.50/20D	34x7	Own 248	6–3⅞x3½	248	6.2	196	88–3000	4–2⅜x4½	Y	Own	4	Own	SF	H	5.71–7.40	Own	L41HV	342	534	CN	TX	60	8¼x3x¼	T
55	AC-500	2–5	1465	136	196		5870	7.00/20D	9.00/20	Own 278	6–3⅝x4½	278	6.0	220	100–2800	7–2¾x10¾	Y	Own	5	Own	SF	H	5.71–7.40	Own	L41HV	342	534	CN	TX	60	8½x3½x⅞	T
56	AC-550	2–5½	1795	136	196		5970	7.50/20D	9.75/20	Own 278	6–3⅝x4½	278	6.0	220	100–2800	7–2¾x10¾	Y	Own	5	Own	SF	H	5.63–7.20	Own	L41HV	386	613	CN	TX	60	8⅞x3½x⅞	T
57	AC-600	2½–6	2010	136	196		6660	7.50/20D	9.75/20	Own 308	6–3¾x4½	308	6.1	244	107–2600	7–2¾x10¾	Y	Own	5	Own	SF	H	5.63–7.16	Own	L41HV	389	663	N	TX	60	8¾x3½x¼	T
58	AC-650	2½–6½	2455	136	196		7130	8.25/20D	10.50/20	Own 308	6–3¾x4½	308	6.1	244	107–2600	7–2¾x10¾	Y	Own	5	Own	SF	R	5.63–7.16	Own	L41HV	480	769	N	TX	60	8¾x3½x¼	T
59	AC-700	3½–7	3235	136	196		7860	8.25/20D	10.50/20	Own 361	6–4⅛x4½	361	6.0	284	118–2500	7–3x11⅞	Y	Own	5	Own	2F	R	5.63–7.16	Own	L41HV	528	849	N	TX	60	9⅛x3½x⅜	T
60	AC-800	4–8	4695	136	196		9240	9.00/20D	11.25/20	Own 264	6–4¼x5	426	6.0	340	141–2400	7–3x11⅞	Y	Own	5	Own	2F	R	7.38–9.41	Own	TW41A	617	923	N	TX		9⅛x3½x⅜	TL
61	AC-850	5–10	5215	136	196		9795	9.00/20D	11.25/24	Own 451	6–4⅝x5	451	6.0	360	145–2400	7–3x11⅞	Y	Own	5	Own	2F	R	7.34–9.19	Own	TW41A	617	923	N	TX	60	9⅛x3½x⅜	TL
62	(c.o.e.) Sp. Del	1	1385	112	...		2820	7.00/16S	7.50/188	Own 230	6–3⅛x4⅛	230	6.2			4–2⅛rx5⅛	N	Own	3	Own	SF	H	4.57–5.14	Own	O4IH	200	297	eC	2I		6½x2½x⅛	T
63	(c.o.e.) AF-300	1½–4	745	108	157		3910	6.00/20†8	7.50/20	Own 228	6–3⅞x3½	228	6.2	180	80–3000	4–2⅜x4½	N	Own	4	Own	SF	H	5.67–6.20	Own	O4IH	337	478	C	2I	64	7x2¾x⅛	T
64	(c.o.e.) AF-350	1½–4½	910	108	193		4510	6.00/20†8	8.25/20	Own 228	6–3⅞x3½	228	6.2	180	80–3000	4–2⅜x4½	N	Own	4	Own	SF	H	5.67–6.67	Own	LO41H	349	478	C	2I	64	8½x2½x⅛	T
65	(c.o.e.) AF-400	1½–5	1095	108	193		4670	6.00/20D	34x7	Own 248	6–3⅞x3½	248	6.2	196	88–3000	4–2⅜x4½	Y	Own	4	Own	SF	H	5.67–6.67	Own	LO41HV	352	483	CN	TX	64	8¼x3x¼	T
66	(c.o.e.) AF-450	1½–5	1270	108	193		5045	6.50/20D	34x7	Own 248	6–3⅞x3½	248	6.2	196	88–3000	4–2⅜x4½	Y	Own	4	Own	SF	H	5.71–7.40	Own	L41HV	342	534	CN	TX	64	8¼x3x¼	T
67	(c.o.e.) AF-500	2–5½	1640	108	196		6075	7.00/20D	9.00/20	Own 278	6–3⅝x4½	278	6.0	220	100–2800	7–2¾x10¾	Y	Own	5	Own	SF	H	5.71–7.40	Own	L41HV	345	584	N	TX	64	8½x3½x⅞	T
68	(c.o.e.) AF-550	2–6	1970	108	196		6175	7.50/20D	9.75/20	Own 278	6–3⅝x4½	278	6.0	220	109–2800	7–2¾x10¾	Y	Own	5	Own	SF	H	5.63–7.20	Own	L41HV	389	663	N	TX	64	8½x3½x⅞	T
69	(c.o.e.) AF-600	2½–6½	2205	108	196		6645	7.50/20D	9.75/20	Own 308	6–3¾x4½	308	6.1	244	107–2600	7–2¾x10¾	Y	Own	5	Own	SF	R	5.63–7.16	Own	L41HV	437	743	N	TX	64	8¾x3½x¼	T
70	(c.o.e.) AF-650	2½–7	2650	108	196		7125	8.25/20D	10.50/20	Own 308	6–3¾x4¼	308	6.1	244	107–2600	7–2¾x10¾	Y	Own	5	Own	SF	R	5.63–7.16	Own	L41HV	528	849	N	TX	64	8¾x3½x¼	T
71	(c.o.e.) AF-700	3½–8	3460	108	196		7965	8.25/20D	10.50/20	Own 361	6–4⅛x4½	361	6.0	284	118–25C0	7–3x11⅞	Y	Own	5	Own	SF	R	5.63–7.16	Own	L41HV	511	869	N	TX	64	9⅛x3½x⅜	T
72	(c.o.e.) AF-800	4–10	4920	108	196		9395	9.00/20D	11.25/20	Own 426	6–4¼x5	426	6.0	340	141–2400	7–3x11⅞	Y	Own	5	Own	2F	R	7.38–9.41	Own	TW41A	617	923	N	TX	64	9⅛x3½x⅜	TL
73	(c.o.e.) AF-850	5–12	5325	108	196		9805	9.00/20D	11.25/24	Own 451	6–4⅝x5	451	6.0	360	145–2400	7–3x11⅞	Y	Own	5	Own	2F	R	7.34–9.19	Own	TW41A	617	923	N	TX	64	9⅛x3½x⅜	TL
74	(D) ADC-500	2–5	3300	136	196		6715	7.00/20D	9.00/20	Own 3-718	3–4¼x5	213	16	230	65–2000	4–3½x4¾	Y	Own	5	Own	SF	H	5.71–6.29	Own	L41HV	342	534	CN	TX	60	8½x3½x⅞	T
75	(c.o.e.) (D) ADF500	2–5½	3475	108	196		6925	7.00/20D	9.00/20	Own 3-718	3–4¼x5	213	16	230	65–2000	4–3½x4¾	Y	Own	5	Own	SF	H	5.71–6.29	Own	L41HV	345	584	N	TX	64	8⅞x3½x⅞	T
76	(D) ADC-600	2½–6	3895	136	196		7570	7.50/20D	9.75/20	Own 3-71	3–4¼x5	213	16	263	83–2000	4–3½x4¾	Y	Own	5	Own	SF	H	5.63–7.16	Own	L41HV	389	663	N	TX	60	8¾x3½x¼	T
77	(c.o.e.) (D) ADF600	2½–6½	4090	108	196		7560	7.50/20D	9.75/20	Own 3-71	3–4¼x5	213	16	263	83–2000	4–3½x4¾	Y	Own	5	Own	SF	H	5.63–7.16	Own	L41HV	437	743	N	TX	64	8¾x3½x¼	T
78	(D) ADC-700	3½–7	5385	136	196		8850	8.25/20D	10.50/20	Own 4-718	4–4¼x5	284	16	308	86–2000	5–3½x5¼	Y	Own	5	Own	SF	H	5.63–6.43	Own	L41HV	528	849	N	TX	64	9⅛x3½x⅜	T
79	(c.o.e.) (D) ADF700	3½–8	5610	108	196		8960	8.25/20D	10.50/20	Own 4-718	4–4¼x5	284	16	308	86–2000	5–3½x5¼	Y	Own	5	Own	SF	R	5.63–6.43	Own	L41HV	511	869	N	TX	64	9⅛x3½x⅜	T
80	(D) ADC-800	4–8	6550	136	196		10065	9.00/20D	11.25/20	Own 4-71	4–4¼x5	284	16	350	110–2000	5–3½x5¼	Y	Own	5	Own	2F	R	7.38–8.64	Own	TW41A	617	923	N	TX	60	9⅛x3½x⅜	T
81	(c.o.e.) (D) ADF800	4–10	6775	108	196		10235	9.00/20D	11.25/20	Own 4-71	4–4¼x5	284	16	350	110–2000	5–3½x5¼	Y	Own	5	Own	2F	R	7.38–8.64	Own	TW41A	617	923	N	TX	64	9⅛x3½x⅜	T
82	(D) ADC-850	5–10	7000	136	196		10630	9.00/20D	11.25/24	Own 4-71	4–4¼x5	284	16	350	110–2000	5–3½x5¼	Y	Own	5	Own	2F	R	7.34–9.19	Own	TW41A	617	923	N	TX	64	9⅛x3½x⅜	T
83	(c.o.e.) (D) ADF850	5–12	7110	108	196		10650	9.00/20D	11.25/24	Own 4-71	4–4¼x5	284	16	350	110–2000	5–3½x5¼	Y	Own	5	Own	2F	R	7.34–9.19	Own	TW41A	617	923	N	TX	64	9⅛x3½x⅜	T
84	Gramm 15A	1½–2	735	136	220	9500	3000	6.00/20S	7.00/20	Her QXB3	6–3¼x4½	205	5.5	135	61–3100	7–2½x10⅛	N	WG T9	4	Cla R650	SF	H	5.62–6.28	Cla F182	L41H	210	352	a	TX	55	7x2¼x⅜	T
85	25A	1½–2	765	136	220	11500	3200	6.00/20S	34x7	Her QXB3	6–3¼x4½	205	5.5	135	61–3100	7–2½x10⅛	N	WG T9	4	Cla R750	SF	H	5.1–6.8	Cla F182	L41H	240	392	a	TX	55	7x2¼x⅜	T
86	25A	1½–3	795	136	220	12000	3200	6.00/20S	34x7	Her JXA	6–3½x4¼	228	5.2	154	66–2800	7–2½x10⅛	N	WG T9	4	Cla R750	SF	H	5.1–6.8	Cla F266	L41H	298	432	a	TX	55	7x2¼x⅜	T

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Line Number	MAKE AND MODEL	GENERAL (See Keynote) Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight with Max. Tires	Chassis Wt. (Stripped)	TIRE SIZES D-dual rear S-single rear: Standard Front and Rear	Maximum Tire Size Furnished	ENGINE DETAILS: Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings: Number, Diameter and Length	Governor Standard	TRANSMISSION: Make and Model	Forward Spd's	REAR AXLE: Make and Model	Gear and Type	Drive & Torque	Gear Ratio Range in High	FRONT AXLE: Make and Model	BRAKES: SERVICE Make Location Type Operat'n.	Lining Area	Drum Area	Drum Material	Hand Location Type	C-A Dimensions (Std. W. B.)	FRAME: Side Rail Dimensions	Type
♦1	Mack.....ED		675	120	136		3150	6.00/17S	6.50/17	Own EN11	6–3 7/16 x4 3/4	210	5.7	145	67–3000	4–2 1/4 x6	N	WG TR27	3	Cla RA40	SF	H	5.12–6.33	Cla FA18	L4IH	246	284	a	TX	52	7x2 7/8 x 3/8	T
♦2	.....(a).....EE		985	133	175		4650	6.00/20S	7.50/20	Own FO	6–3 1/2 x4 3/8	253	5.7	160	75–2800	7–2 5/8 x12	N	WG TR11	4	Tim RA11	SF	H	5.14–5.66	Own FA12	L4IH	296	478	a	TX	60	7 1/8 x3x 3/8	T
♦3	.....EF		1195	133	192		4900	6.00/20D	8.25/20	Own FM	6–3 5/8 x4 3/8	271	5.7	178	78–2800	7–2 5/8 x12	N	WG TR11	4	Tim RA16	SF	H	4.85–6.80	Own FA12	L4IHV	327	528	a	TX	60	7 1/8 x3x 3/8	T
♦4	.....EG		1495	133	193		5150	6.50/20D	8.25/20	Own FK	6–3 3/4 x4 3/8	290	5.7	192	85–2800	7–2 5/8 x12	N	Fu TR14	5	Tim RA21	SF	H	4.86–6.80	Own FA16	L4IHV	329	650	a	TX	60	8x3x 1/4	T
♦5	.....EJ		1625	158	194		5350	6.50/20D	9.25/20	Own EJ	6–3 1/2 x5	288	5.5	190	84–2800	7–2 5/8 x10 1/2	N	Fu TR14	5	Tim RA21	SF	H	4.86–6.80	Own FA16	L4IHV	329	650	a	TX	84	8x3 1/4 x3 1/4	T
♦6	.....EH		2095	158	194		6000	7.00/20D	9.00/20	Own BG	6–3 5/8 x5	310	5.4	202	90–3000	7–2 5/8 x10 1/2	Y	Fu TR14	5	Tim RA26	SF	H	4.44–7.40	Own FA19	L4IHV	370	686	a	TX	84	8 1/2 x3 1/4 x 1/4	T
♦7	.....EH		2245	158	194		6075	7.00/20D	9.00/20	Own BG	6–3 5/8 x5	310	5.4	202	90–3000	7–2 5/8 x10 1/2	Y	Fu TR14	5	Own RA28	2F	H	6.87–8.59	Own FA19	L4IHV	370	686	a	TF	84	8 1/2 x3 1/4 x 1/4	T
♦8	.....ER		2950	146	194		7350	8.25/20D	9.75/20	Own BG	6–3 5/8 x5	310	5.4	202	90–3000	7–2 5/8 x10 1/2	Y	Fu TR14	5	Own AB	CD	R	7.7–13.1	Own FA19	O4IMV	441	735	a	TX	72	8 1/2 x3 1/4 x 1/4	T
9	.....EM		2495	158	194		7350	7.50/20D	9.75/20	Own BG	6–3 5/8 x5	310	5.4	202	90–3000	7–2 5/8 x10 1/2	Y	Own BF	5	Own EM	SF	H	5.43–6.33	Own EM	O4IMV	468	750	a	TX	84	9 1/4 x3 1/4 x 3/8	T
10	.....ES		4000	144	210		8100	8.25/20D	9.75/22	Own CU	6–3 7/8 x5	354	5.3	237	100–2800	7–2 5/8 x10 1/2	Y	Own BF	5	Own AB	CD	R	9.3–13.0	Own BF	O4IMV	563	920	a	TX	72 1/2	8 1/2 x3x 1/4	T
11	.....EQ		2995	158	194		7650	8.25/20D	9.75/20	Own CU	6–3 7/8 x5	354	5.3	237	100–2800	7–2 5/8 x10 1/2	Y	Own FD	2F	H	6.31–8.64	Own EQ	O4IMV	468	750	a	TX	84	9 1/4 x3 1/4 x 3/8	T
12	.....BM		4250	175	211		9175	9.00/20D	10.50/20	Own CE	6–4x5 1/2	415	5.0	270	108–2400	7–3x12 3/8	Y	Own CF	5	Own FD	2F	H	6.31–8.64	Own BM	O4IMV	562	920	a	TX	102 1/2	8 1/2 x3x 1/4	T
13	.....BX		5250	189	225		10925	9.75/22D	11.25/24	Own CF	6–4 1/4 x5 1/2	468	5.0	310	118–2400	7–3x12 3/8	Y	Own CF	5	Own FE	2F	H	6.46–9.05	Own BX	O4IMV	690	976	a	TX	120	10 3/4 x3 1/4 x 3/8	T
14	.....BX		6250	189	225		11200	9.75/22D	11.25/24	Own CF	6–4 1/4 x5 1/2	468	5.0	310	118–2400	7–3x12 3/8	Y	Own CF	5	Own BX	CD	R	6.0–9.67	Own BX	O4IMV	649	976	a	TX	120	10 3/4 x3 1/4 x 3/8	T
15	.....BQ		7600	194	230		12500	10.50/24D	11.25/24	Own BQ	6–4 3/4 x5 3/4	611	4.8	390	125–2200	4–3 1/2 x10 1/2	Y	Own AK	4	Own BQ	2F	H	7.43–10.0	Own BQ	O4IMV	781	1194	a	FX	120	10 1/2 x3x 1/4	T
16	.....AK		7600	186	240		12700	10.50/24D	11.25/24	Own BQ	6–4 3/4 x5 3/4	611	4.8	390	125–2200	4–3 1/2 x10 1/2	Y	Own AK	4	Own BQ	2F	H	7.43–10.0	Own AK	O4IA	781	1194	a	FX	102	8 5/8 x3x 3/8	T
17	.....AC		6150	192	228		13425	36x6†D	13.50/24	Own AC	4–5x6	471	3.9	300	74–1600	3–5x10 1/2	Y	Own AC	4	Own AC	CD	R	8.95–11.5	Own AK	O4IMV	781	1194	a	T	120	8 5/8 x3x 3/8	T
18	.....AC		8250	186	240		14200	10.50/24D	13.50/24	Own BQ	6–4 3/4 x5 3/4	611	4.8	390	125–2200	4–3 1/2 x10 1/2	Y	Own AC	4	Own AC	CD	R	8.95–11.5	Own AK	O4IA	781	1194	a	T	102	8 5/8 x3x 3/8	T
19	.....(e.f.) EEU		1180	107	162		4800	6.00/20S	7.50/20	Own FO	6–3 1/2 x4 3/8	253	5.7	160	75–2800	7–2 5/8 x12	N	WG TR11	4	Tim RA11	SF	H	5.14–5.66	Own FA12	L4IH	296	478	a	TX	65	8x3x 3/8	T
20	.....(e.f.) EFU		1390	107	162		5000	6.00/20D	8.25/20	Own FM	6–3 5/8 x4 3/8	271	5.7	178	78–2800	7–2 5/8 x12	N	WG TR11	4	Tim RA16	SF	H	4.85–6.80	Own FA12	L4IHV	325	528	a	TX	65	8x3x 3/8	T
♦21	.....(e.f.) EGU		1690	107	162		5250	6.50/20D	8.25/20	Own FK	6–3 3/4 x4 3/8	290	5.7	192	85–2800	7–2 5/8 x12	N	Fu TR14	5	Tim RA21	SF	H	4.86–6.80	Own FA16	L4IHV	329	650	a	TX	65	8x3x 1/4	T
♦22	.....(e.f.) EHU		2320	114	162		6050	7.00/20D	9.00/20	Own BG	6–3 5/8 x5	310	5.4	202	90–3000	7–2 5/8 x10 1/2	Y	Fu TR14	5	Tim RA26	SF	H	4.44–7.40	Own FA19	L4IHV	370	686	a	TX	72	9x3 1/4 x 1/4	T
23	.....ERU		2470	114	162		6125	7.00/20D	9.00/20	Own BG	6–3 5/8 x5	310	5.4	202	90–3000	7–2 5/8 x10 1/2	Y	Fu TR14	5	Own RA28	2F	H	6.87–8.59	Own FA19	L4IHV	370	686	a	TF	84	9 1/4 x3 1/4 x 1/4	T
24	.....(e.f.) EMU		2720	114	162		7250	7.50/20D	9.75/20	Own BG	6–3 5/8 x5	310	5.4	202	90–3000	7–2 5/8 x10 1/2	Y	Own BF	5	Own EM	SF	H	5.43–6.33	Own EM	O4IMV	468	750	a	TX	72	9 1/4 x3 1/4 x 3/8	T
25	.....(e.f.) EQU		3220	114	162		7700	8.25/20D	9.75/20	Own CU	6–3 7/8 x5	354	5.3	237	100–2800	7–2 5/8 x10 1/2	Y	Own BF	5	Own FD	2F	H	6.31–8.64	Own EQ	O4IMV	468	750	a	TX	72	9 1/4 x3 1/4 x 3/8	T
26	.....(*) (e.b.s.) EC		3600	117	171		7200	7.50/20D	9.00/20	Own BG	6–3 5/8 x5	310	5.4	202	90–3000	7–2 5/8 x10 1/2	Y	Own BF	5	Own EM	SF	H	5.43–6.33	Own EC	O4IMV	468	704	a	TX	93	8 1/2 x3x 1/4	T
27	.....(*) (e.b.s.) EB		4250	117	171		7900	8.25/20D	9.75/20	Own CU	6–3 7/8 x5	354	5.9	237	100–2800	7–2 5/8 x10 1/2	Y	Own BF	5	Own FD	2F	H	6.31–8.64	Own EB	O4IMV	468	709	a	TX	93	8 1/2 x3x 1/4	T
28	.....(*) (e.b.s.) CH		5150	135	189		10225	9.00/20D	10.25/20	Own CE	6–4x5 1/2	415	5.0	270	108–2400	7–3x12 3/8	Y	Own CF	5	Own FD	2F	H	6.31–8.64	Own CH	O4IMV	562	920	a	TX	111	8 1/2 x3x 1/4	T
29	.....(*) (e.b.s.) CJ		6100	135	189		10750	9.75/22D	11.25/24	Own CF	6–4 1/4 x5 1/2	468	5.0	310	118–2400	7–3x12 3/8	Y	Own CF	5	Own FE	2F	H	6.46–9.00	Own CJ	O4IMV	906	976	a	TX	111	10 5/8 x3 1/4 x 3/8	T
30	Plymouth (*) PT57	Com'l	560	116	116	4000	1850	6.00/16S	6.00/16S	Own	6–3 1/2 x4 1/2	201	6.7	145	70–3000	4–2 1/4 x5 1/2	N	Own	3	Own	Hy 1/2	H	3.73–4.78	Own	O4IH	148	251	C	TX	37 1/2	6x2x 1/2	C
31	Reo (x) . . (**) 4-50	1/2	579	114	120		1973	6.00/16S	6.50/16	Own	4–3 7/16 x4 3/8	140	5.4	98	42–2800	3–2 1/4 x4 1/2	N	WG T84C	3	Spi	S 1/2	H	4.55–4.90	Own	L4IH	198	242	C	TX	38 3/4	5 1/2 x2 1/4 x 3/8	T
32	.....(**) 6-50	1/2	613	114	120		2063	6.00/16S	6.50/16	Own	4–3 7/16 x4 3/8	209	5.4	145	70–2800	4–2 1/4 x5 1/2	N	WG T86	3	Spi	S 1/2	H	4.55–4.90	Own	L4IH	198	242	C	TX	38 3/4	5 1/2 x2 1/4 x 3/8	T
33	.....(**) 4-75	3/4	661	114	120		2081	6.50/16S	7.50/16	Own	4–3 7/16 x4 3/8	140	5.4	98	42–2800	3–2 1/4 x4 1/2	N	WG T84C	3	Spi	SF	H	**5.10	Spi	L4IH	213	327	C	TX	38 3/4	5 1/2 x2 1/4 x 3/8	T
34	.....(**) 6-75	3/4	695	114	120		2171	6.50/16S	7.50/16	Own	4–3 7/16 x4 3/8	209	5.4	145	70–2800	4–2 1/4 x5 1/2	N	WG T86	3	Spi	SF	H	**5.10	Spi	L4IH	213	327	C	TX	38 3/4	5 1/2 x2 1/4 x 3/8	T
35	.....1A4-1C4	1–1 1/2	656	139	166		2930	6.00/20S	7.00/20	Own	6–3 7/8 x4 3/8	209	5.4	145	70–2800	4–2 1/4 x5 1/2	N	Own	4	Own	SF	H	5.28–6.33	Own	L4IH	246	366	C	TX	57 1/2	7 1/4 x2 5/8 x 3/8	T
36	.....1B4-1D4	1 1/2–2 1/2	732	139	190		3405	6.00/20S	7.50/20	Own	6–3 5/8 x4 1/4	228	5.4	150	73–3000	7–2 5/8 x10 1/2	N	Own	4	Own	SF	H	5.28–6.33	Own	L4IH	289	438	a	TX	57 1/2	7 1/4 x2 5/8 x 3/8	T
37	.....(*) 1B7M	1 1/2–2 1/2	1190	105	166		3630	6.00/20S	7.50/20	Own	6–3 5/8 x4 1/4	228	5.4	150	73–3000	7–2 5/8 x10 1/2	N	Own	4	Own	SF	H	5.28–6.33	Own	L4IHV	289	438	a	TX	60 1/2	7 1/4 x3x 1/4	T
38	.....1B4H-1D4H	1 1/2–2 1/2	822	139	190		3425	6.00/20S	7.50/20	Own	6–3 5/8 x5	268	5.5	160	81–2800	7–2 5/8 x10 1/2	N	Own	4	Own	SF	H	5.28–6.33	Own	L4IH	289	438	a	TX	57 1/2	7 1/4 x2 5/8 x 3/8	T
39	.....2B4–2D4	2–3	980	142	190		4225	6.50/20D	8.25/20	Own	6–3 1/2 x5	268	5.5	178	83–2800	7–2 5/8 x10 1/2	N	Own	4	Own	SF	H	5.28–6.33	Own	L4IH	349	523	a	TX	60 1/2	7 1/4 x3x 3/8	T
40	. .(6) 2H5Z–2J5Z	2–4	1317	150	205		4656	8.25/20D	8.25/20	Own	6–3 1/2 x5	268	5.5	178	83–2800	7–2 5/8 x10 1/2	N	Cla	5	Own	2F	H	6.62–8.21	Own	L4IHV	349	523	a	TX	60 1/2	7 1/4 x3x 1/4	TL
41	.....(*) 2B7M	2–4	1492	105	166		4095	6.50/20D	8.25/20	Own	6–3 1/2 x5	268	5.5	178	83–2800	7–2 5/8 x10 1/2	N	Own	5	Own	SF	H	5.28–6.33	Own	L4IHV	349	523	a	TX	60 1/2	7 1/4 x3x 1/4	TL
42	. . .3H5(3J5-3K5)	3–5	1909	153	205		6280	7.50/20D	9.75/20	Own	6–3 5/8 x5	309	5.4	204	87–2800	7–2 5/8 x10 1/2	Y	Own	4	Own	SF	H	6.14–7.17	Own	L4IHV	407	660	c	FD	67 3/4	8 1/4 x3x 1/4	TB
43	. . .3HR5(3JR5-3KR5)	3 1/2–5	2266	153	205		6470	7.50/20D	9.75/20	Own	6–3 5/8 x5	309	5.4	204	87–2800	7–2 5/8 x10 1/2	Y	Cla	5	Own	2F	H	** –8.5	Own	L4IHV	407	660	c	FD	67 3/4	8 1/4 x3x 1/4	TB
44	. . .4H5(4J5-4K5)	4–6	2988	156	205		7270	8.25/20D	10.50/20	Buda	6–4 5/8 x4 3/4	428	4.7	284	104–2600	7–3x11 1/2	Y	BL	5	Own	2F	H	** –8.5	Own	L4IHV	407	660	c	FD	67 3/4	10x3x 1/4	TB
45	.....4WH5	4–6	3350	156	205		7650	8.25/20D	10 50/20	Buda	6–4 5/8 x4 3/4	428	4.7	284	104–2600	7–3x11 1/2	Y	BL	5	Own	2F	H	** –8.5	Own	W84IA	407	660	c	FD	67 3/4	10x3x 1/4	TB
46	Ster-. . .FB50 De L	2–2 1/2	1915	177	207	13000	4900	7.00/20D	8.25/20	Wau 6BK	6–3 3/4 x4 1/4	282	5.2	188	85–3200	7–2 5/8 x10 1/4	N	WG T9	4	Tim 53307H	SF	R	5.83–6.80	Tim 33000H	L4IH	328	616	a	TX	91	10x3 1/4 x 1/4	L
47	ling. .FB60 De L	2 1/2–3	2065	177	207	15000	5150	7.00/20D	8.25/20	Wau 6BK	6–3 3/4 x4 1/4	282	5.2	188	85–3200	7–2 5/8 x10 1/4	N	Own UC12	4	Tim 54411H	SF	R	5.83–6.80	Tim 33000H	L4IHV	338	672	a	TX	91	10x3 1/4 x 1/4	L
48	.....FB70 De L	3–4	2315	177	207	17000	5475	7.50/20D	9.00/20	Wau 6BK	6–3 3/4 x4 1/4	282	5.2	188	85–3200	7–2 5/8 x10 1/4	N	Own UC6	4	Tim 56410H	SF	R	5.71–7.40	Tim 33000H	L4IHV	338	754	a	TX	91	10x3 1/4 x 1/4	L
49	.....FD70	3–4	2384	177	207	17000	5540	7.50 20D	9.00 20	Wau 6BK	6–3 3/4 x4 1/4	282	5.2	188	85–3200	7–2 5/8 x10 1/4	N	Own UC6	4	Tim 76410H	SF	R	7.35–8.21	Tim 33000H	L4IHV	338	754	a	TX	91	10x3 1/4 x 1/4	L
50	.....FB80	3 1/2–4 1/2	3070	177	207	22000	6525	8.25/20D	9.75/20	Wau 6MK	6–4 1/4 x4 3/4	381	6.1	252	85–2500	7–2 5/8 x12 1/2	Y	Own UC25	5	Tim 58300H	SF	R	5.57–7.80	Tim 33000H	L4IHV	384	794	a	TX	91	10x3 1/4 x 1/4	L
51	.....FD90	4–5	3340	177	207	22000	7175	9.00/20D	9.75/20	Wau 6MK	6–4 1/4 x4 3/4	381	6.1	252	85–2500	7–2 5/8 x12 1/2	Y	Own UC25	5	Wis 720001	2F	R	5.61–8.40	Tim 33000H	L4IHV	384	756	a	TX	91	10x3 1/4 x 1/4	L
52	.....FC90	4–5	3250	177	207	22000	6775	8.25/20D	9.75/20	Wau 6BK	6–3 3/4 x4 1/4	282	5.2	188	85–3200	7–2 5/8 x10 1/4	N	Own TU90H	CD	R	7.74–10.8	Tim 33000H	L4IHV	384	1138	s	TX	91	10x3 1/4 x 1/4	L
53	.....FD95	4 1/2–5 1/2	3840	177	207	26000	7850	9.75/20D	10.50/22	Wau 6MZ	6–4 1/4 x4 3/4	404	5.7	267	89–2400	7–2 5/8 x12 1/2	Y	BL5351	5	Tim 75733H	2F	R	6.85–9.41	Tim 35000H	L4IHV	478	892	a	TX	91	10x3 1/4 x 1/4	L
54	.....FC95	4 1/2–5 1/2	4035	177	207	26000	7775	9.75/20D	10.50/22	Wau 6MZ	6–4 1/4 x4 3/4	404	5.7	267	89–2400	7–2 5/8 x12 1/2	Y	BL5351	5	Own TU95H	CD	R	7.74–10.8	Tim 35000H	L4IHV	478	1138	s	TX	91	10x3 1/4 x 1/4	L
55	.....(7) FD97	5–6	5300	195	225	26000	8235	9.75/20D	10.50/24	Wau 6SRL	6–4 5/8 x5 1/2	462	4.6	302	102–2400	7–3x13 3/8	Y	Own UC2	4	Tim 75733H	2F	R	6.85–9 41	Tim 35100H	L4IHV	510	990	a	TX	107	9x3 1/4 x 1/4	L
56	.....(7) FC100	5–6	5245	195	225	26000	7835	9.75/20D	10.50/24	Wau 6SRL	6–4 5/8 x5 1/2	462	4.6	302	102–2400	7–3x13 3/8	Y	Own UC2	CD	R	6 11-10 8	Tim 35000N	O21MV	576	724	a	TX	107	9x3 1/4 x 1/4	L
57	.....(7) FD115	6–7	5745	195	225	32000	8685	9.75/20D	10.50/24	Wau 6–125	6–4 3/4 x5 1/2	462	5.0	328	125–2400	7–3x13 3/8	Y	Own UC2	4	Tim 76733H	2F	R	6.86–9 20	Tim 35100H	L4IHV	510	1030	a	TX	107	9x3 1/4 x 1/4	L
58	.....(7) FC135	6–7	5580	195	225	34000	8835	9.75/22D	10.50/24	Wau 6–125	6–4 5/8 x5 1/2	462	5.0	328	125–2400	7–3x13 3/8	Y	Own UC2	4	Own 1B140M	CD	R	6 11-10 8	Tim 26450N	O21MV	528	746	s	TX	107	9x3 1/4 x 1/4	L
59	.....(7) FD140	7–8	6860	195	225	36000	9850	10.50/20D	11.25/24	Wau 6SRK	6–4 3/4 x5 1/2	517	4.5	331	110–2300	7–3x13 3/8	Y	Own UC2	4	Wis 1910W	2F	R	7.16–10.0	Tim 26450T W	W84IA	574	970	a	TX	107	9x3 1/4 x 1/4	L
60	.....(7) HC140	7–8	5715	189	219	36000	9485	9.75/22D	10.50/24	Wau 6–125	6–4 5/8 x5 1/2	462	5.0	328	125–2400	7–3x13 3/8	Y	Own UC2	4	Own 1B140M	CD	R	7 40-10 8	Tim 26452N	O21MV	646	746	s	JX	107	9 1/4 x3 1/4 x 3/8	L
61	.....(7) HC185	10–14	8930	182	228	45000	11785	10.50/24S	13.50/24	Wau 6RB	6–5x5 3/4	677	5.3	470	145–2000	4–3 1/2 x11 3/8	Y	Own UC9	4	Ow NS185W	CD	R	7.31–12 .4	Tl 27452-TW	W84IA	708	1176	s	TX	92 3/4	9 1/4 x3 1/4 x 3/8	L
62	.....(7) HC200	12–15	9895	182	228	50000	14985	10.50/24S	13.50/24	Wau 6RB	6–5x5 3/4	677	5.3	470	145–2000	4–3 1/2 x11 3/8	Y	Own UC9	4	Ow S8200-W	CD	R	9.26–12.4	Tl 27452-TW	W84IA	708	1176	s	JX	92 3/4	9 1/4 x3 1/4 x 3/8	L
63	.....(7) HC250	15–18	11495	177	177	60000	16985	11.25/24S	13.50/24	Wau 6RB	6–5x5 3/4	677	5.3	470	145–2000	4–3 1/2 x11 3/8	Y	BL 7341	4	Ow WS250-W	CD	R	9.26–12.4	Tl 27451-TW	W84IA	708	1176	s	JX	92 3/4	12x3 1/2 x 3/4	L
64	Stewart.....40AH	1/2	595	117	...	.....	2190	6.00/16S	7.50/16	Con	4–3 7/16 x4 3/8	162	5.7	120	50–2800	3–2 1/4 x4 1/2	N	WG	4	Spi	SF	H	** 5.1	Spi	L4IH	216	320	C	T	45 1/4	6x2 1/4 x 1/2	T
65	.....40A	3/4	595	117	132	.....	2190	6.00/16S	7.50/16	Con	4–3 7/16 x4 3/8	162	5.7	120	50–2800	3–2 1/4 x4 1/2	N	WG	4	Spi	SF	H	** 5.1	Spi	L4IH	216	320	C	T	45 1/4	6x2 1/4 x 1/2	T
66	.....60A	3/4	645	117	132	.....	2325	6.00/16S	7.50/16	Con	6 3x4	170	6.2	124	60–2800	4–2 1/4 x5 1/2	N	WG	4	Spi	SF	H	** 5.1	Spi	L4IH	216	320	C	T	45 1/4	6 1/4 x2 1/4 x 1/2	T
67	.....62A	1 1/2–2	695	128	176	.....	3390	6.00/20S	7.50/20	Con	6–3 1/4 x4 3/8	218	5.9	155	65–2800	4–2 1/4 x5 1/2	N	WG	4	Cla	SF	H	5.50–6.80	Cla	L4IH	256	472	a	T	56 1/4	8 1/2 x2 3/4 x 1/2	T
68	.....45AL	1 1/2–2 1/2	795	134	188	.....	3490	6.00/20S	7.50/20	Wau	6–3 1/2 x4 1/4	245	6.1	165	70–2800	7–2 5/8 x10 1/4	N	WG	4	Cla	SF	H	5.50–6.80	Cla	L4IH	256	472	a	T	54	8 1/2 x2 3/4 x 1/4	T
69	.....47A	2–3	1045	134	205	.....	4340	6.50/20D	8.25/20	Wau	6–3 5/8 x4 1/4	263	5.7	175	77–2800	7–2 5/8 x10 1/4	N	WG	4	Cla	SF	H	6.37–6.88	Cla	L4IHV	285	512	a	T	54	8 1/2 x2 3/4 x 1/4	T
70	.....50A	2 1/2–3 1/2	1245	134	205	.....	4490	6.50/20D	8.25/20	Wau	6–3 5/8 x4 1/4	263	5.7	175	77–2800	7–2 5/8 x10 1/4	N	WG	4	Cla	SF	H	6.37–6.88	Cla	L4IHV	365	610	a	T	54	8 1/2 x2 3/4 x 1/4	T
71	.....49A	3–4	1795	144	220	.....	5640	7.00/20D	9.00/20	Wau	6–3 3/4 x4 1/4	282	5.7	190	83–2800	7–2 5/8 x10 3/4	N	Fu	5	Cla	SF	R	7.16–6.4	Cla	L4IHV	408	742	a	T	64	10x2 5/8 x 1/4	T
72	.....51A	3–5	1995	144	220	.....	5840	7.00/20D	9.00/20	Con	6–4 1/16 x4 1/2	361	5.4	225	85–2500	7–2 5/8 x14 1/2	N	Fu	5	Cla	SF	R	7.16–6.4	Cla	L4IHV	408	742	a	T	64	10x2 5/8 x 1/4	T
73	.....58A	3 1/2–5 1/2	2590	164	224	.....	6790	7.50/20D	10.50/20	Wau	6–4 1/4 x4 3/4	404	5.7	300	102–2500	7–2 5/8 x12 1/2	Y	Fu	5	Cla	SF	R	7.16–6.4	Cla	B4IMV	478	810	E	T	88 1/2	10x2 5/8 x 1/4	T
74	.....59A	3 1/2–6	2990	164	224	.....	7290	7.50/20D	10.50/20	Wau	6–4 1/4 x4 3/4	404	5.7	300	102–2500	7–2 5/8 x12 1/2	Y	BL	5	Tim	WF	R	7.25–8.5	Cla	B4IMV	550	835	E	T	88 1/2	10x2 1/2 x 1/4	T
75	.....38A	5–7	4190	160	210	.....	8070	9.00/20D	10.50/20	Wau	6–4 5/8 x5 1/4	517	4.5	330	110–2200	7–3x13 3/8	Y	BL	5	Tim	WF	R	7.25–8.5	Eat	B4IMV	583	934	E	T	84	10x2 1/2 x 1/4	T
76	.....31A	6–8	5590	160	210	.....	9490	9.75/20D	10.50/20	Wau	6–4 5/8 x5 1/2	517	4.5	330	110–2200	7–3x13 3/8	Y	BL	12	Tim	WF	R	8.2–9 0	Eat	W84IA	615	1004	E	T	84	10x2 1/2 x 1/4	T
77	.....1-COE	1 1/2–2 1/2	1045	104	164	.....	3690	6.00/20S	7.50/20	Wau	6–3 1/2 x4 1/2	245	6.1	165	70–2800	7–2 5/8 x10 1/4	N	WG	4	Cla	SF	H	5.50–6.8	Tim	L4IHV	289	485	a	T	63 1/2	8 1/2 x2 3/4 x 1/4	T
78	.....2-COE	2–3	1260	104	164	.....	4540	6.50/20D	8.25/20	Wau	6–3 5/8 x4 1/4	263	5.7	175	77–2800	7–2 5/8 x10 1/4	N	WG	4	Cla	SF	H	6.37–6.8	Tim	L4IHV	289	485	a	T	63 1/2	8 1/2 x2 3/4 x 1/4	T
79	.....3-COE	2 1/2–3 1/2	1390	104	196	.....	4690	6.50 20D	8.25/20	Wau	6–3 5/8 x4 1/4	263	5.7	175	77–2800	7–2 5/8 x10 1/4	N	WG	5	Cla	SF	H	6.37–6.8	Tim	L4IHV	340	585	a	T	63 1/2	8 1/2 x2 3/4 x 1/4	T
80	.....4-COE	3–

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Line Number	MAKE AND MODEL	GENERAL (See Keynote) Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight with Max. Tires	Chassis Wt. (Stripped)	TIRE SIZES D-dual rear S-single rear: Standard Front and Rear	Maximum Tire Size Furnished	ENGINE DETAILS: Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings: Number, Diameter and Length	Governor Standard	TRANSMISSION: Make and Model	Forward Spd's	REAR AXLE: Make and Model	Gear and Type	Drive & Torque	Gear Ratio Range in High	FRONT AXLE: Make and Model	BRAKES: SERVICE Make	Location	Type Operat'n	Lining Area	Drum Area	Drum Material	Hand Location Type	C-A Dimension (Std. W. B.)	FRAME: Side Rail Dimensions	Type
1	Indiana 12X4	1½–2	(10)	131	Op	.....	4650	6.50/20D	7.50/20	Her JXC	6–3¼x4¼	282	5.4	176	73–2800	7–2½x10	Y	BL 2341	4	Tim 53210	SF	H	5.14–5.66	Wis F30B	L4IHV	260	412	G	TD	46½	7¼ x2½x¼	T
2	..... 14X4	2–2	(10)	140	Op	.....	5900	7.50/20D	8.25/20	Her JXC	6–3¾x4¼	282	5.4	176	73–2800	7–2½x10	Y	BL 2341	4	Tim 54413	SF	H	5.14–6.6	Wis F54H	L4IHV	260	528	G	TD	55½	7½x2¾x¼	T
3	..... 16X4	2½–3	(10)	156	Op	.....	7500	7.50/20D	8.25/20	Her WXC	6–4x4½	339	4.7	226	76–2400	7–2½x13	Y	BL 3341	4	Wis 5000L	SF	H	6.35–7.35	Wis F500	L4IHV	330	578	G	TD	72½	7½x3x¼	T
4	..... 18X4	4½–5	(10)	160	Op	.....	9000	9.00/20D	9.75/20	Her YXC	6–4½x4¾	428	4.5	283	94–2200	7–3x14	Y	BL 5341	4	Wis 72000L	2F	H	7.06–8.00	Wis F213	L4IHV	492	867	G	TD	72	8½x3x¼	T
5	..... 18X4A	4½–5	(10)	160	Op	.....	8700	9.00/20D	9.75/20	Her YXC	6–4½x4¼	428	4.5	283	94–2200	7–3x14	Y	BL 5341	4	Tim 58205H	SF	H	6.14–6.83	Wis F580H	L4IHV	345	785	G	TD	72	8x3x¼	T
6	..... 20X4	5–6	(10)	172	Op	.....	10600	9.75/20D	9.75/20	Her RXB	6–4½x5¼	501	4.5	330	106–2000	7–3x12½	Y	BL 5341	4	Wis 1337H	2F	H	7.52–8.59	Wis F311H	L4IHV	582	975	G	TD	84	8¼x3x⅜	T
7	..... 22X4	5½–6½	(10)	185	Op	.....	13000	10.50/20D	10.50/20	Her HXB	6–5x6	707	4.5	455	148–2000	7–3½x17	Y	BL 7341	4	Wis 417W	2F	H	7.14–9.15	Wis 1737W	Ws4IA	648	975	G	TD	84	10x3x⅋	T
8	Kenworth 539	.....	6118	134	146	22700	19180	9.00/20D	9.75/24	Bud K428	6–4¾x4¾	428	5.3	302	108–2400	7–3x11½	Y	Fu 5A62	5	Wis 72300	2F	H	5.77–8.40	Wis F207	L4IHV	458	785	a	PD	72	7½x3¼x½	C
9	 540	.....	7251	134	146	25900	10310	9.75/20D	9.75/24	Bud K428	6–4¾x4¾	428	5.3	302	108–2400	7–3x11½	Y	Fu 5A62	5	Wis 1337	2F	H	6.85–9.41	Wis F323	Ws4IA	648	975	a	PD	72	7½x3¼x½	C
10	 541	.....	7835	134	146	25900	0650	9.75/20D	9.75/24	Bud LO525	6–4½x5½	525	5.5	385	135–2200	7–3x11½	Y	Fu 5A62	5	Wis 1337	2F	H	6.85–9.41	Wis F323	Ws4IA	648	975	a	PD	72	7½x3¼x½	C
11	 542	.....	8412	134	146	35000	10935	0.50/20D	10.50/24	Bud LO525	6–4½x5½	525	5.5	385	135–2200	7–3x11½	Y	Fu 5A62	5	Wis 1757	2F	H	6.02–8.50	Wis F427	Ws4IA	648	975	a	PD	72	7½x3¼x½	C
	Marmon-Herr.																																
12	..... (c) LD2-4	½	1420	113	113	.....	2460	7.50/15S	9.00/15S	Ford V8	8–3⅛x3¾	221	6.1	150	85–3800	3–2.4x5¾	N	Ford	4	Ford	S¾	U	** 4.44	Own LD1	F4IM	186	293	a	2/4 I	36½	5½x2x.11	C
13	..... (c) OT1-4	1	1570	123	123	.....	3322	7.00/17D	7.50/17	Ford V8	8–3⅛x3¾	221	6.1	155	85–3800	3–2.4x5⅜	N	Ford	4	Ford	SF	U	** 4.11	Own 78	F4IM	277	389	c	2/4 I	48¼	6x2¼x¼	C
14	..... (c) E5-4	1½–3	1494	132	132	.....	4040	6.00/20D	32x6	Ford V8	8–3⅛x3¾	221	6.1	150	85–3800	3–2.4x5⅜	N	Ford	4	Ford	SF	U	** 6.67	Own IX41	F4IH	314	421	a	2/4 I	58	7x2¾x⅜	C
15	.(c.o.e.) (c) E5-4	1½	1849	135	135	.....	4206	6.00/20D	32x6	Ford V8	8–3⅛x3¾	221	6.1	150	85–3800	3–2.4x5⅜	..	Ford	4	Ford	SF	U	** 6.67	Own IX42	F4IH	...	....	s	2I	93	7x2¾x.21	C
♦ 16	..... (c) E6-4	1½–3	1539	157	157	.....	4154	6.00/20D	32x6	Ford V8	8–3⅛x3¾	221	6.1	150	85–3800	3–2.4x5⅜	N	Ford	4	Ford	SF	U	** 6.67	Own IX41	F4IH	314	421	a	2/4 I	58	7x2¾x⅜	C
17	..... (*) C10-4	2–2½	2490	143	Op	.....	4430	6.50/20D	7.50/20	Her JXB	6–3⅝x4¼	263	5.4	182	78–2800	7–2½x10	N	WG T9	4	Tim MH811	SF	H	** 6.6	TWH MH81	4IH	267	452	a	TX	60	7½x2½x½	C
18	..... (*) C20-4	2½–3	2820	143	Op	.....	4665	7.00/20D	7.50/20	Her JXC	6–3¾x4¼	282	5.3	196	84–2800	7–2½x10	N	Fu 5A33	5	Tim MH811	SF	H	** 6.6	TWH MH81	4IH	267	452	a	TX	60	7½x2½x½	C
19	..... (*) C30-4	3–3½	3250	143	Op	.....	5155	7.50/20D	8.25/20	Her JXD	6–4x4¼	320	5.3	224	95–2800	7–2½x10	N	Fu 5A33	5	Tim MH822	SF	H	** 6.8	TWH MH82	4IH	281	527	a	TX	60	7½x2½x½	C
20	..... (*) C40-4	3½–4	4550	158	Op	.....	7000	8.25/20D	9.00/20	Her WXC3	6–4¼x4½	383	5.0	260	106–2800	7–2¾x13¼	Y	Fu 5A430	5	Tim MH833	SF	H	** 5.5	TWH MH83	4IH	342	578	a	FD	72	9½x3x¼	C
21	..... (*) C50-4	4–5	4995	158	Op	.....	7895	9.00/20D	9.75/20	HerWXLC3	6–4¼x4¼	404	5.0	293	118–2800	7–2½x13¼	Y	Fu 5A430	5	Tim MH844	SF	H	** 7.8	TWH MH84	4IH	384	785	a	FD	72	9½x3x¼	C
22	..... (*) C55-4	4½–5½	5400	158	Op	.....	8100	9.00/20D	9.75/20	Her RXB	6–4½x5¼	501	4.5	330	110–2200	7–3x14	Y	Fu 5A62	5	Wis MH844	SF	H	** 7.8	Wis MH84	4IH	384	785	a	FD	72	9½x3x¼	C
23	...(*) C55DR-4	6–7	6120	158	Op	.....	8500	9.00/20D	9.75/20	Her RXB	6–4½x5¼	501	4.5	330	110–2200	7–3x14	Y	Fu 5A62	5	Wis MH888	2F	H	** 7.52	WH MH88	4IH	738	975	a	FD	72	9½x3x¼	C
24	..... (*) C60-4	5–6	6500	161	Op	.....	8785	9.00/20D	9.75/20	Her RXB	6–4½x5¼	501	4.5	330	110–2200	7–3x14	Y	Fu 5A620	5	Wis MH866	2F	H	** 7.27	WH MH86	4IH	461	785	a	FD	72	9½x3x¼	C
25	..... (*) C70-4	6–7	8895	161	Op	.....	9880	9.75/20D	9.75/22	Her RXB	6–4½x5¼	501	4.5	330	110–2200	7–3x14	Y	Fu 5A620	5	Wis MH899	2F	H	** 7.52	WH MH89	4IA	738	975	a	FD	72	10⅛ x3x⅛	C
26	..... (*) C80-4	7–9	9750	161	Op	.....	10420	10.50/20D	10.50/22	Her RXC	6–4⅝x5¼	529	4.9	350	114–2200	7–3x14	Y	Fu 5A620	5	Wis MH900	2F	H	** 8.05	WH MH90	4IA	738	975	a	FD	72	10⅛x3x⅛	C
27	.....(*)TH515-4	7–9	11910	198	Op	.....	12600	10.50/20D	10.50/22	Her HXD	6–5½x6	855	4.5	555	180–2000	7–3½x17	Y	BL 7341	4	Wis MH900	2F	H	** 8.05	WH MH90	4IA	738	975	a	FD	102	8½x3x⅛	P
28	.....(*)TH520-4	8–10	12900	198	Op	.....	13850	10.50/20D	10.50/24	Her HXE	6–5¾x6	935	4.5	610	198–2000	7–3½x17	Y	BL 7341	4	Wis MH911	2F	H	** 8.88	WH MH91	4IA	738	975	a	FD	102	10¼x3x¾	P
29	(D)..(*) CD20-4	2½–3	4095	143	Op	.....	5420	7.50/20D	7.50/20	Her DJXB	6–3½x4½	260	14.	178	79–2600	7–3x10	Y	Fu 5A33	5	Tim MH811	SF	H	** 5.57	TWH MH81	4IH	267	452	a	TX	60	7½x2½x½	C
30	(D)..(*) CD30-4	3–3½	4425	143	Op	.....	5615	7.50/20D	8.25/20	Her DJXC	6–3¾x4½	298	14.	194	90–2600	7–3x10	Y	Fu 5A33	5	Tim MH822	SF	H	** 5.56	TWH MH82	4IH	281	527	a	TX	60	7½x2½x½	C
31	(D)(*)CD55DR-4	5–6	8412	158	Op	.....	9800	9.00/20D	9.75/20	Her DRXB	6–4½x5¼	474	14.	350	124–2200	7–3x13¼	Y	Fu 5A62	5	Wis MH888	2F	H	** 6.36	WH MH88	4IH	738	975	a	FD	72	9½x3x¼	C
32	(D)..(*) CD70-4	6–7	11350	161	Op	.....	10775	9.75/20D	9.75/22	Her DRXB	6–4½x5¼	474	14.	350	124–2200	7–3x13¼	Y	Fu 5A620	5	Wis MH899	2F	H	** 6.36	WH MH89	4IA	738	975	a	FD	72	10⅛ x3x⅛	C
33	(D)..(*) CD80-4	7–9	12150	161	Op	.....	11315	10.50/20D	10.50/22	Her DRXB	6–4½x5¼	474	14.	350	124–2200	7–3x13¼	Y	Fu 5A620	5	Wis MH900	2F	H	** 7.14	WH MH90	4IA	738	975	a	FD	72	10⅛x3x⅛	C
34	(D)(*)THD515-4	7–9	14435	198	Op	.....	13300	10.50/20D	10.50/22	Her DHXB	6–5x6	707	14.	530	176–1800	7–3½x17¼	Y	BL 7341	4	Wis MH900	2F	H	** 7.14	WH MH90	4IA	738	975	a	FD	102	8½x3x⅛	P
35	(D)(*)THD520-4	8–10	15135	198	Op	.....	14500	10.50/20D	10.50/24	Her DHXB	6–5x6	707	14.	530	176–1800	7–3½x17¼	Y	BL 7341	4	Wis MH911	2F	H	** 7.95	WH MH91	4IA	738	975	a	FD	102	10¼x3x¾	P
36	Oshkosh..... JCB	2	2885	153	200	14000	5900	7.00/20D	9.00/20	Her JXC	6–3¾x4¼	282	5.3	197	85–3000	7–2½x10	Y	Fu	5	Own JCB	SF	H	4.4–5.2	Own JCB	L4IH	335	578	a	TX	71	6x3½x¼	P
37	..... JD	3	3490	153	200	15500	6050	7.50/20D	9.00/20	Her JXD	6–4x4¼	320	5.3	224	94–2800	7–2½x10	Y	Fu	5	Own JD	SF	H	4.4–5.2	Own JD	L4IH	335	578	a	TX	71	6x3½x¼	P
38	..... B3S	3½–4	5140	146	201	21500	8250	10.50/20S	10.50/20	Her WXC3	6–4½x4½	383	4.7	265	106–2800	7–2¾x13¾	Y	Fu	5	Own B3S	SF	H	4.8–7.8	Own B3S	L4IH	510	867	G	TX	78¾	7x3x½	TfL
♦ 39	..... B3D	4	5590	146	201	23000	8250	10.50/20S	10.50/20	Her WXC3	6–4½x4½	383	4.7	265	100–2400	7–2¾x13¾	Y	Fu	5	Own B3D	2F	H	5.0–8.4	Own B3D	L4IH	560	867	G	TX	78¾	7x3x½	TfL
40	..... C3S	4–5	5635	146	201	23800	8700	9.75/20D	11.25/20	Her YXC2	6–4½x4¾	453	4.4	300	100–2400	7–3x14	Y	Fu	5	Own C3S	SF	H	6.0–7.8	Own C3S	L4IH	518	867	G	TX	82	7x3x½	TfL
♦ 41	..... C3D	4–5	6185	146	201	24000	9575	9.75/20D	11.25/20	Her YXC2	6–4½x4¾	453	4.4	300	100–2400	7–3x14	Y	Fu	5	Own C3D	2F	H	5.6–8.4	Own C3D	L4IH	630	975	G	TX	82	7x3x½	TfL
♦ 42	..... FS	5	6275	146	201	25000	9600	10.50/20S	11.25/20	Her RXB	6–4½x5¼	500	4.4	330	110–2200	7–3x12¼	Y	Fu	5	Own FS	2F	H	5.8–8.4	Own FS	L4IH	630	975	G	TX	82	7x3x½	TfL
♦ 43	..... FC	6	6500	146	201	26000	9500	9.75/20D	11.25/20	Her RXB0	6–4½x5¼	500	5.4	360	121–2200	7–3x12¼	Y	Fu	5	Own FC	2F	H	5.8–6.67	Own FC	L4IH	630	975	G	TX	82	7x3x½	TfL
♦ 44	..... FB	6–7	6700	146	201	29000	10300	10.50/20D	11.25/20	Her RXC0	6–4⅝x5¼	529	5.4	380	128–2200	7–3x12¼	Y	Fu	5	Own FB	2F	H	5.8–6.67	Own FB	L4IH	630	975	G	TX	82	8x3x½	TfL
♦ 45	..... FD	7½	7650	146	201	30000	11500	10.50/20D	12.00/20	Her RXC0	6–4⅝x5¾	529	5.4	380	128–2200	7–3x13¼	Y	Fu	5	Own FD	2F	H	6.2–7.1	Own FD	L4IH	630	975	G	TX	82	8x3x½	TfL
♦ 46	..... BG3	10	8840	168	193	38000	14200	10.50/24D	13.50/20	Her HXB	6–5x6	707	4.5	455	148–2000	7–3½x16⅝	Y	BL	4	Own BG	2F	H	4.7–6.8	Own BG3	B4IM	666	975	G	TX	85	10x3¼x½	L
♦ 47	..... GD	10–12	10400	168	193	40000	14200	13.50/20S	13.50/20	Her HXE	6–5¾x6	935	4.5	610	199–2000	7–3½x16⅝	Y	BL	4	Own GD	2F	H	5.3–7.4	Own GD	B4IM	666	975	G	TX	85	10x3¼x⅜	L
♦ 48	Walter ..... FND	3–4	5700	126	150	20000	7500	9.75/20S	9.00/20	Wauk WNK	6–4¼x4¾	381	5.0	270	90–2200	7–2¾x10¼	Y	Own FJN	6	Own FNB	2D	H	6.0–8.0	Own FN	O4IA	450	670	G	FI	84	7x2¾x¼	T
♦ 49	..... FMD	4–5	7200	126	150	24000	8500	9.00/20D	9.75/20	Wauk WSRL	6–4⅝x5⅛	462	5.0	325	110–2200	7–3x13⅞	Y	Own FJD	6	Own FMB	2D	H	6.0–8.0	Own FM	O4IA	450	670	G	FI	84	12x3½x½	TB
♦ 50	..... FKMD	5	7500	126	150	28000	9000	9.75/20D	10.50/20	Wauk WSRK	6–4⅝x5⅛	517	5.0	345	120–2200	7–3x13⅞	Y	Own FJD	6	Own FJB	2D	H	6.0–8.0	Own FJ	O4IA	450	670	G	FI	84	12x3½x½	TB
♦ 51	..... FCKD	5–7	8400	126	138	30000	10500	9.75/24D	10.50/24	Wauk WSRK	6–4⅝x5½	517	5.0	345	120–2200	7–3x13¾	Y	Own FC	6	Own FCC	2D	H	7.5–9.0	Own FC	O4IA	450	670	G	FI	84	13x3¾x½	TB
♦ 52	..... FCS	5–7	8600	1 8	162	30000	11000	9.75/24D	10.50/24	Wauk WSRK	6–4⅝x5½	517	5.0	345	120–2200	7–3x13¾	Y	Own FC	6	Own FCC	2D	H	7.5–9.0	Own FC	O4IA	560	670	D	FI	96	14x3¾x½	TB
♦ 53	..... FBS	5–8	9900	138	162	31000	12000	10.50/24D	10.50/24	Wauk WRB	6–5x5¾	677	5.5	465	150–2200	4–3½x11⅝	Y	Own FA	6	Own FCC	2D	H	7.5–9.0	Own FC	O4IA	560	890	D	FI	96	14x3¾x½	TB
♦ 54	..... FBRS	7–10	10500	138	162	46000	13000	11.25/24E	12.00/24	Wauk WRB	6–5x5¾	677	5.5	465	150–2200	4–3½x11⅝	Y	Own FA	6	Own FCR	2D	H	7.5–9.0	Own FCR	O4IA	560	890	D	FI	96	14x3¾x½	TB
♦ 55	..... AXBS	5–8	10700	138	162	31000	12000	10.50/24D	10.50/24	Her HXE	6–5¾x6	935	5.3	610	200–2000	7–3½x16⅝	Y	Own FA	6	Own FCC	2D	H	7.5 –9.1	Own FC	O4IA	560	890	D	FI	108	14x3¾x½	TB
56	.....(D) ADKD	5–7	10000	126	138	28000	10500	9.75/24D	10.50/24	Her DRXB	6–4½x5¼	474	...	350	125–2000	7–3x13¼	Y	Own FA	6	Own FCC	2D	H	7.5 –9.1	Own FC	O4IA	560	890	D	FI	96	14x3¾x½	TB
57	.....(D) ADBS	5–8	11000	138	162	31000	12000	10.50/24D	10.50/24	Cum HB6	6–4⅞x6	672	...	500	150–1800	7–4½x16	Y	Own FA	6	Own FCC	2D	H	7.5 –9.1	Own FC	O4IA	560	890	D	FI	108	14x3¾x½	TB
58	.....(D) ADVD	15	12500	126	162	50000	15000	13.50/24D	13.50/24	Cum HB6	6–4¾x6	672	...	500	150–1800	7–4½x16	Y	Own FA	6	Own AV	2D	H	** 10.5	Own AV	O4IA	620	1020	D	FI	96	14x3¾x½	TB
	Six-Wheelers Wheels Driven																																
59	(a) Autocar (1) ▼																																
60	(a) 6x2 RL 2F	.....	2715	164	182	32000	9345	8.25/20D	9.00/20	Own 358	6–4x4¾	358	5.5	250	85–2300	7–3x12½	Y	Own RL5	5	Own RL	2F	H	6.49–7.89	Tim 32502	LO4IDV	466	694	c	FD	84	8½x3x⅞	T
61	(a) 6x2 DF 2F	.....	4250	164	218	36000	10485	9.00/20D	9.75/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14¾	Y	Own DF5	5	Own DFA	2F	H	6.49–7.89	Tim 35100	LO4IDV	580	930	c	FD	84	9x3x¼	T
62	(a) 6x2 NF 2F	.....	5300	182	218	40000	11985	9.75/20D	10.50/20	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14¾	Y	Own TF5	5	Own C	2F	H	7.20–9.43	Tim 26452	LO4IDV	580	930	c	FD	102	10⅜x3x¾	T
63	(a) 6x2 T 2F	.....	5900	208	222	45000	12985	9.75/20D	10.50/20	Own 501	6–4½x5¼	501	5.5	375	123–2200	7–3¼x14	Y	Own TF5	5	Own CG	2F	H	7.69–8.52	Tim 26452	TO4IA	631	930	c	FD	128	10½x3x⅋	T
	6x4 DF 4R	.....	5750	139	139	35000	11005	9.00/20D	9.00/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14¾	Y	Own DF5	5	Tim SD252H	2F	H	7.66–8.44	Tim 35100	L4IHV	667	758	c	FD	59	9x3x¼	TI.
	6x4 TO 4R	.....	8550	184	184	40000	14115	9.75/20D	9.75/20	Own 501	6–4½x5¼	501	5.5	375	123–2200	7–3¼x14	Y	Own TF5	5	Tim SDD352	2F	H	8.15–9.11	Tim 26452	T4IA	598	907	c	FD	104	10½x3x⅋	TL
	6x4 TD 4R	.....	8700	142	142	40000	14415	9.75/24D	9.75/24	Own 501	6–4½x5¼	501	5.5	375	123–2200	7–3¼x14	Y	Own TF4A3	12	Tim SDD352	2F	H	8.15–9.11	Tim 26452	T4IA	598	907	c	FD	62	9x3x¼	TL
	6x4 TC 4R	.....	9500	142	142	52000	15045	10.50/24D	10.50/24	Own 501	6–4½x5¼	501	5.5	375	123–2200	7–3¼x14	Y	Own TF4A3	12	Tim SDD452	2F	H	8.15–9.11	Tim 26452	T4IA	598	907	c	FD	62	10½x3x⅋	TL
68	(a) 6x2 UD 2F	.....	4700	127	145	32000	10930	9.00/20D	9.75/20	Own 358	6–4x4¼	358	5.5	250	85–2300	7–3x12½	Y	Own UDF5	5	Own C	2F	H	7.20–9.43	Tim 35100	LO4IDV	580	930	c	FD	102½	8½x3x¼	T
69	(a) 6x2 UN 2F	.....	5200	128	163	36000	11660	9.00/20D	9.75/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14¾	Y	Own UDF5	5	Own C	2F	H	7.20–9.43	Tim 26452	LO4IDV	580	930	c	FD	103¼	9x3x¼	T
70	(a) 6x2 UNF 2F	.....	5500	128	163	40000	12290	9.75/20D	10.50/20	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14¾	Y	Own UTF5	5	Own C	2F	H	7.20–9.43	Tim 26452	LO4IDV	580	930	c	FD	103¼	9x3x¼	T
71	(a) 6x2 UT 2I	.....	5800	145	163	45000	13130	9.75/20D	10.50/20	Own 501	6–4½x5¼	501	5.5	375	123–2200	7–3¼x14	Y	Own UTF5	5	Own CG	2F	H	7.69–8.52	Tim 26452	TO4IA	631	930	c	FD	120½	10½x3x¼	T
72	6x4 UTO 4R	.....	8500	118	118	40000	13590	9.75/20D	9.75/20	Own 501	6–4½x5¼	501	5.5	375	123–2200	7–3¼x14	Y	Own UTF5	5	Tim SDD352	2F	H	8.15–9.11	Tim 26452	T4IA	598	907	c	FD	93½	9x3x¼	TL
73	6x4 UTD 4R	.....	8750	109	109	48000	13490	9.75/24D	9.75/24	Own 501	6–4½x5¼	501	5.5	375	123–2200	7–3¼x14	Y	Own UTF5	5	Tim SDD352	2F	H	8.15–9.11	Tim 27452	T4IA	598	907	c	FD	84¼	9x3x¼	TL
74	Bro'kway180XSBT 5–7		4350	195	207	.....	9800	8.25/20D	9.00/22	Con 32B	6–4½x4½	361	5.4	252	95–2500	7–2¾x13	Y	Fu 5A38	5	Tim 2518RT	SF	R	5.57–6.83	Shu 15695B1	L6IHV	685	1224	a	CD	125☆	8¼x3x½	B
75	.180XSBT Spec. 5–7		4950	195	207	.....	10270	8.25/20D	9.00/22	Con 34B	6–4½x4½	427.4	5.3	308	118–2600	7–2¾x13	Y	Fu 5A53	5	Tim 2518BT	SF	R	5.57–6.83	Shu 15695B1	L6IHV	685	1224	a	CD	125☆	8¼x3x½	B
76	Corbitt .35SB2 2F	6–8	4800	190	Op	.....	9100	9.00/20D	9.75/22	Con 1603	6–4¼x4½	383	5.6	280	104–2400	7–2¼x13	N	Fu 5A430	5	Tl SBT1500TW	SF	A	6.06–7.40	Tl 33000TW	Ws61A	636	1094	a	TD	Opt	8½x3½x⅜	T
	.50SB3 3F	8–10	5800	190	Op	.....	10700	9.75/20D	10.50/22	Con 21B	6–4¼x4½	428	5.6	308	118–2500	7–2½x13	N	Fu 5A620	5	Tl SBT 252W	SF	A	4.55–7.80	Tl 35100TW	Ws61A	668	1193	a	TD	Opt	8½x3½x⅜	T
	.50SB4 4F	8–10	5800	190	Op	.....	10700	9.75/20D	10.50/22	Con 21B	6–4¼x4½	428	5.6	308	118–2500	7–2½x13	N	Fu 5A620	5	Tl SBD2800H	SF	A	6.26–8.05	Tim 30020H	L6IHV	382	608	a	TX	Opt	8½x3½x⅜	T

(*) Price includes chassis & cab.

(*) Price includes chassis & cab.

| | | |

Line Number	MAKE AND MODEL	GENERAL (See Keynote)							TIRE SIZES			ENGINE DETAILS										TRANS-MISSION		REAR AXLE			FRONT AXLE	BRAKES					FRAME	
		Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight with Max. Tires	Chassis Wt. (Stripped)	Standard Front and Rear D-dual rear S-single rear	Maximum Tire Size Furnished		Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Number, Diameter and Length Main Bearings		Governor Standard	Make and Model	Forward Spd's	Make and Model	Gear and Type	Drive & Torque	Gear Ratio Range in High	Make and Model	Make Location Type Operat'n	SERVICE Lining Area	SERVICE Drum Area	SERVICE Drum Material	Hand Location Type	C-A Dimension (Std. W. B.)	Side Rail Dimensions	Type
1	Ster- FBT152 2C 2F	8–10	4105	177	207	32000	9475	9.00/20D	9.75/20		Wau 6MZ	6–4¼x4½	404	5.7	267	89–2400	7–2⅝x12½		Y	Own U25	5	Tim 8BT261H	SF	U 5.83–8.57	Tim 35000N	L4rHV	584	1024	a	TX	91	10x3¼x¼	L
2	ling.. FW8152 4R	8–10	4560	177	207	32000	9850	9.00/20D	9.75/20		Wau 6MZ	6–4¼x4½	404	5.7	267	89–2400	4–2¾x5		N	Chev	4	Tim 8W251H	WF	U 6.5 –9.02	Tim 35000N	L4rHV	584	1024	a	TX	91	10x3¼x¼	L
3	(7) F18180 4R	10–12	8490	181	211	40000	13500	9.75/20D	10.50/22		Wau 6-125	6–4⅛x5½	462	5.0	328	125–2400	7–3x13½		Y	Own UC2	4	Tim 8D352W	2F	R 7.33–9.11	Tim 24450N	W441A	900	1352	A	TX	93	9¼x3¾x¼	L
4	(7) HC8210 4R	12–18	11595	185	201	55000	14685	40x8D	10.50/24		Wau 6RB	6–5x5¾	677	5.3	470	145–2000	4–3½x11½		Y	Own UC9	4	Own SR210W	CD	R 9.98–13.25	Tim 27452N	W441A	792	1464	a	FX	95	9¼x3¾x⅝	L
5	Truckstell																																
6	(C) TRC-2X250	2F 3½–6	1673	152	250	20000	5935	7.00/20D	7.50/20		Chevrolet	6–3½x3¾	216	6.2	170	78–3200	4–2¾x5		N	Chev	4	Eat 1265	SFd	U 5.83–8.57	Chev	B61HV	511	729	pc	2I	78¾	7½x3⅜x⅜	C
7	(C) TRC-3X400	2F 3½–7	1936	154	250	24000	5985	7.50/20D	8.25/20		Chevrolet	6–3½x3¾	216	6.2	170	78–3200	4–2¾x5		N	Chev	4	Eat 1465	SFd	U 6.5 –9.02	Chev	B61HV	511	729	pc	2I	80½	7½x3⅜x⅜	C
8	(C) TRF-2X250	2F 3½–6	1348	155	250	20000	5970	7.00/20D	7.50/20		Ford V8	8–3⅛x3¾	239	6.1	170	95–3600	3–2.5x4.6		N	Ford	4	Eat 1250	SFd	U 5.83–8.57	Ford	F61HV	572	836	a	2I	81¼	7½x3⅜x⅜	C
9	(C) TRF-3X400	2F 3½–7	1569	156	250	24000	6125	7.50/20D	8.25/20		Ford V8	8–3⅛x3¾	239	6.1	170	95–3600	3–2.5x4.6		N	Ford	4	Eat 1450	SFd	U 6.5 –9.02	Ford	F61HV	572	836	a	2I	82⅝	7½x3⅜x⅜	C
10	coe(c) F2X250	2F 3½–6	1762	122	222	20000	6045	7.00/20D	7.50/20		Ford V8	8–3⅛x3¾	239	...	170	95–3600	3–2.5x4.6		N	Ford	4	Eat 1250	SFd	U 5.83–8.57	Ford	F61HV	572	836	a	2I	81¼	7½x3⅜x⅜	C
11	coe(c) F2X400	2F 3½–7	2071	123	223	24000	6539	7.50/20D	8.25/20		Ford V8	8–3⅛x3¾	239	...	170	95–3600	3–2.5x4.6		N	Ford	4	Eat 1450	SFd	U 6.50–9.02	Ford	F61HV	572	836	a	2I	82⅝	7½x3⅜x⅜	C
12	White	904 4R	3185	160	214	.....	7260	7.00/20D	8.25/20		Own 270	6–3⅛x4½	270	5.8	200	91–2900	7–2⅛x10.7		Y	Own 28B	4	Tim SBD 1000	2F	R 5.93–8.30	Own 22D	L61HV	514	843	a	TX	84¼	7x2⅜x¼	TF
13	.....	918 4R	4995	154	208	.....	6300	9.00/20D	9.75/22		Own 318	6–3⅝x4½	318	6.3	245	110–3000	7–2⅛x10.7		Y	Own 54B	5	Tim 8D 252	2F	R 7.0–8.4	Own 16D	L61HV	718	1224	a	TX	84	8½x3⅛x⅝	P
14	.....	920 4R	7550	158	235	.....	12230	9.00/20D	10.50/22		Own 460	6–4⅛x5¼	460	5.0	320	123–2400	7–2⅜x13⅛		Y	Own 36B	5	Tim 8DD353	2F	R 7.33–9.11	Own 24D	O61A	798	1294	a	TD	84	8½x3⅛x⅝	P
15	.....	922 4R	9350	158	235	.....	13575	9.75/20D	11.25/22		Own 530	6–4⅜x5¼	530	5.0	390	134–2400	7–2⅜x13⅛		Y	Own 36B	5	Tim 8DD452	2F	R 8.15–10.2	Own 9D	O61A	1079	1503	a	TD	84	8½x3¼x⅝	P
16	.....	991 4R	10990	149	245	.....	15825	10.50/24D	11.25/24		Own 540	6–4⅜x5¼	540	4.6	365	130–2300	7–3x15¼		Y	Own 10B1B	5	Tim 8DD452	2F	R 8.15–10.2	Own 13D	O61A	1079	1503	a	TD	84½	8½x3¼x⅝	C
	.....	950 4R	5520	160	237	.....	12500	9.00/20D	9.75/20		Own 362	6–3⅞x5⅛	362	5.8	280	116–3000	7–3x10.8		Y	Own 51B	5	Tim 8D262	2F	R 7.00–8.40	Own 16D	L6IHV	718	1224	a	TX	84	8½x3⅛x⅝	L

Clark Axle Housing

The Clark one-piece, heat treated, truck axle housing made by the Clark Equipment Co., Buchanan, Mich., is completely formed from one piece of tubing in seven patented forming operations. In these operations not only is the diameter of the original tube shrunk to a smaller dimension on each side of the banjo center housing case, but metal is flowed in the forming processes to those points of greatest stress in the axle where greater strength is needed.

Thus in the forming of the one-piece housing a structure is obtained, having its greatest wall thickness at the point of greatest load. The heat-treating of such a lightweight structure produces a housing in which maximum tensile strength and resiliency are obtained, and assures a durability with less unsprung weight.

Air Compressor

The Worthington Pump & Machinery Corp., Harrison, N. J., announces its latest development in air compressors, the balanced-angle V-type, known as VA and VA-2 compressors.

Available in a wide variety of arrangements, these machines may be had with either electric or gasoline engine power.

ARE YOUR DRIVERS "SEAT-SMASHERS"?

If so, write today for a free test sample of Chase REDO ...and learn why this coated upholstery *can take it.* Endurance... Stamina... Ruggedness—you'll find 'em all in every yard of Chase REDO.

If you want upholstery in your "rolling stock" to look and *be* like new after miles of service, get a test sample of REDO—convince yourself—and then specify Chase REDO in new equipment or for upholstery replacements.

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DODGE DIESEL

(CONTINUED FROM PAGE 37)

equipped with an automatic time control switch to facilitate starting in cold weather.

The combustion chamber is of double-O shape with an auxiliary double chamber energy cell. Fuel is injected across the chamber, a considerable portion of the charge entering the energy cell through a venturi-shaped passage simultaneously with the entry of air during the compression stroke. Combustion begins in the main chamber, giving the good cold weather starting and high speed qualities of the direct injection or open chamber type of diesel. However, since most of the fuel is ignited within the confines of the energy cell, peak pressures are kept from pistons and bearings, and a high degree of turbulence is produced by the discharge from the cell. A nozzle of the pintle type is employed, giving maximum freedom from plugging and carbonizing and resulting distortion of the spray pattern.

A feature of the fuel injection pump is automatic control of injection timing in accordance with engine speed, and speed-governed regulation of maximum fuel quantity.

Timing advance is accomplished automatically and in response to engine speed by a simple centrifugal governor. The timing control weights, under the action of centrifugal force, give endwise motion of the rotor driving shaft which is driven by the main pump drive shaft through a spirally splined connection. This endwise motion changes the phase relation between the main pump shaft and the rotor driving shaft, thus advancing the timing of injection in response to speed. Motion of the rotor driving shaft is communicated to the timing control arm and the force set up by the timing control weights is opposed by the force of the timing control springs. The upper end of the timing control arm carries the maximum fuel quantity limiting cam.

Limitation of maximum fuel quantity is accomplished by causing the timing control arm to determine the position of a stop by which the maximum quantity of fuel which may be injected is limited.

The fuel quantity limiting arm is pivoted in the control unit. This arm has the form of a bell crank. The extended end of the top horizontal portion of the arm bears on a lever which is pivoted in the control box and has its position determined by a follower roller which bears on a cam-shaped stop. The vertical portion of the fuel quantity limiting arm has a pair of fingers protruding through the bottom of the control unit. These fingers engage a thrust bearing on the splined rotor driving member, the position of these fingers limiting the axial position of the central rotary valve of the hydraulic unit.

The fuel quantity limiting cam with its follower roller and lever, together with the fuel quantity limiting arm, have as their principal function the limitation of the maximum quantity of fuel which can be delivered by the pump. In normal operation, these parts never come into use except when the engine is called upon for maximum torque.

STOP "GAS" LOSSES!

AND SAVE MONEY

¾ ACTUAL SIZE

THE DAYTON FUELOMETER offers POSITIVE GAS PROTECTION

The Dayton Fuelometer is a precision instrument designed to record truck and passenger car gasoline consumption for positive protection against losses and to provide accurate figures for your cost records.

The Dayton Fuelometer operates on pressure from the fuel pump. Measures gasoline flow to one one-hundredth part of a gallon. Will carry any load up to 22 gallons per hour by practical test.

Mounts any place convenient to fuel pump and carburetor—has fuel leads to both. Complete installation is only a matter of minutes. Easily read at desired intervals.

Built entirely of finest non-corrosive bronze and brass metals. Will withstand rough handling and usage. Absolutely tamperproof. Guaranteed for one year.

- Stops fuel withdrawal from carburetor.
- Eliminates collusion between drivers and clerks.
- Provides accurate system of fuel checking.
- Points out best routes.
- Discourages faked figures on reports and charge slips.
- Prevents roadside stops to tamper with gas.
- Checks engine efficiency.
- Shows up inefficient drivers.

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Dayton, Ohio

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WILLYS

(Continued From Page 34)

of alloy steel.

Seven in. depth straight side rails are provided. In addition to a well appointed cab, the present production includes express, platform, stake and deluxe streamlined stake bodies.

Lockheed hydraulic brakes operate on four wheels with separate emergency brake mounted back of transmission. Steering gear is of the twin lever type. Standard chassis equipment includes cowl with ventilator, front shock absorbers, chrome plated hubcaps, front fenders and cab length running board. Mounted on the dash are speedometer, oil gauge, gasoline gauge, engine temperature indicator and ammeter, all indirectly lighted. Gasoline filter, air cleaner, tools and jack, as well as spare tire carrier and one spare wheel, are a part of the standard chassis.

This truck fitted with Eberhard Door Locks and Holders. Builder—Jacob Press & Sons, Chicago

Even when new, most Eberhard high-quality fastenings and specialties for commercial vehicle bodies are no more expensive than ordinary fittings.

But the big pay-off comes after a year or two of operation in tough, steady service. That is when inferior equipment begins to cost real money; that is when Eberhard design and quality pay real dividends; that is when true economy is found and appreciated.

"In the Long Run" is the proper slogan for operators of modern, hard-working trucks. Every part must be considered for its ability to "take it" and maintenance costs must be kept down. More and more, discriminating operators are turning to Eberhard for truly economical body hardware.

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E

MUTINY

(Continued From Page 21)

A showdown vote was forestalled when the contract carrier and local cartage groups made known that they had formed a joint committee of five, to consult further on their proposal. The Policy Committee saw the reasonableness and friendliness of this gesture and authorized the appointment of five of its members to meet with the joint committee with instructions to make a report direct to the Board of Directors at the annual business session.

This special committee agreed upon compromise suggestions which, temporarily at least, quelled the threatening "mutiny." These suggestions were presented to the Board of Directors in the following form:

"The criticisms of the Board of Directors and the Executive Committee which prompted the resolution (that dealing with the by-laws amendment), were to the effect that there did not exist a proper representation of the natural divisions of the industry on the Board of Directors and also on the Advisory Committee. This condition has apparently been brought about due to the fact that in some states, local state associations did not represent all the natural divisions of the industry.

"In analyzing Article V of the by-laws, the contract carrier group pointed out that under Article V the Directors as now elected consist (in each state) of 'one, a fixed terminal or regular route common carrier operator; one, a contract carrier operator; one, a local cartage operator, and one, a private carrier; and three who shall be elected at the will of the members of the industry and may include truck manufacturer representatives or representatives of other allied lines of business.' The committee felt that in view of this provision, state associations had selected more than two representatives from one class of carriers, rather than selecting two regular route fixed terminal carriers, two contract carriers, two local cartage carriers, and one private carrier, resulting in an unbalanced Board between the va-

(Turn to Page 62, Please)

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The statement that Lincoln makes *great* equipment is no idle boast. It is a proven fact—substantiated by satisfied owners throughout the world.

Sound engineering and advanced design are clearly reflected in all Lincoln units. A few of the units are described below, but you should review Catalog No. 51 for details on the complete line which covers a range from 1-lb. capacity hand guns, 25-lb. dispensing units, 100-lb. units, up to large units dispensing lubricant directly from original 400-lb. drum.

Model 326

TWIN CYLINDER AIRLINE LUBRIGUN, Model 326 (shown above) meets the needs of large fleet operator. This unit dispenses chassis lubricant from original 400-lb. drum. Steel sleeve is finished in baked white enamel, with sleeve cover in rich red. Furnished complete with quick detachable union outlet and Flex-O-Matic Air Coupler. Diameter 26″, Height 50″.

Model 426

GEAR LUBRICANT DISPENSER, Model 426 (shown above) matches style and finish of corresponding sleeve units in 400-lb. series. Designed for stationary installation. Pump tube is of correct length to reach bottom of refinery drum. Includes sleeve with cover for original 400-lb. drum, quick detachable union outlet and Flex-O-Matic Air Coupler.

Model 497

MOTOR OIL DISPENSER, Model 497 (shown above) meets the demand for an oil dispensing unit that enables operator to fill a crankcase with oil as rapidly as the modern gasoline pump fills the gas tank.

Get details on these units, and all others in this complete line, by getting in touch with your nearest Lincoln jobber—or write us.

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(CONTINUED FROM PAGE 60)
rious classes of carriers. It was recognized that such state organizations who had created an unbalanced board had done so in conformity with the now existing by-laws.

"The special committee recommended:

"1. That the Executive Committee and Board of Directors seriously consider amendment of Article V between this convention and the next meeting of the Board of Directors to provide that all Directors and regional vice-presidents be elected from the various classes of operators;

"2. That the procedure for the election of Directors from each state be amended in such a manner as to provide that each class of carriers, namely — common, contract, local cartage and private carriers shall elect their own representatives on the Board of Directors from each state, through the affiliated association or associations within that state."

The Board of Directors voted acceptance of the special committee's report.

Report of Group Meetings

The group meetings of the natural divisions revealed some of the reasons for the cleavage that exists and some of the protective measures taken to protect group interests.

The Common Carrier Division passed one resolution aimed directly at contract carriers. In its refined form the resolution read as follows:

"That the Common Carrier Division is strongly opposed to the Interstate Commerce Commission approving any rate or adopting any rule, regulation or policy that will permit the patrons of any motor carrier to receive an undue advantage or preference over the patrons of any other motor carrier."

The resolution also authorized the chairman of the Division to take appropriate action to protect its interests in this regard.

The primary purpose of this resolution is to level the rates between the common and contract carriers; in short, to compel contract carriers to raise their rates to the common carrier level for services that the common carrier performs.

Another resolution, which seemed to contain a point amply covered by the one above, was tabled and referred to the national traffic committee. Its intent was to insure unification and equalization of rates of common and contract carriers between common points in a common area.

The Common Carrier Division reelected as its chairman James B. Godfrey, Jr., of Great Central Transport Corp., Detroit. Dwight Sutherland, of New York, was elected vice-chairman.

At their divisional meeting the contract carriers took steps to protect their interests, as threatened chiefly by the activities of the common carriers. They formed Contract Carriers, Inc., a corporate entity which will handle legal matters, finances, etc. The Board of Directors of the corporation was empowered, at its discretion, to take all steps necessary to affiliate this corporation with any national association connected with the trucking industry. This provision had in it an element of anticipation. Its aim apparently

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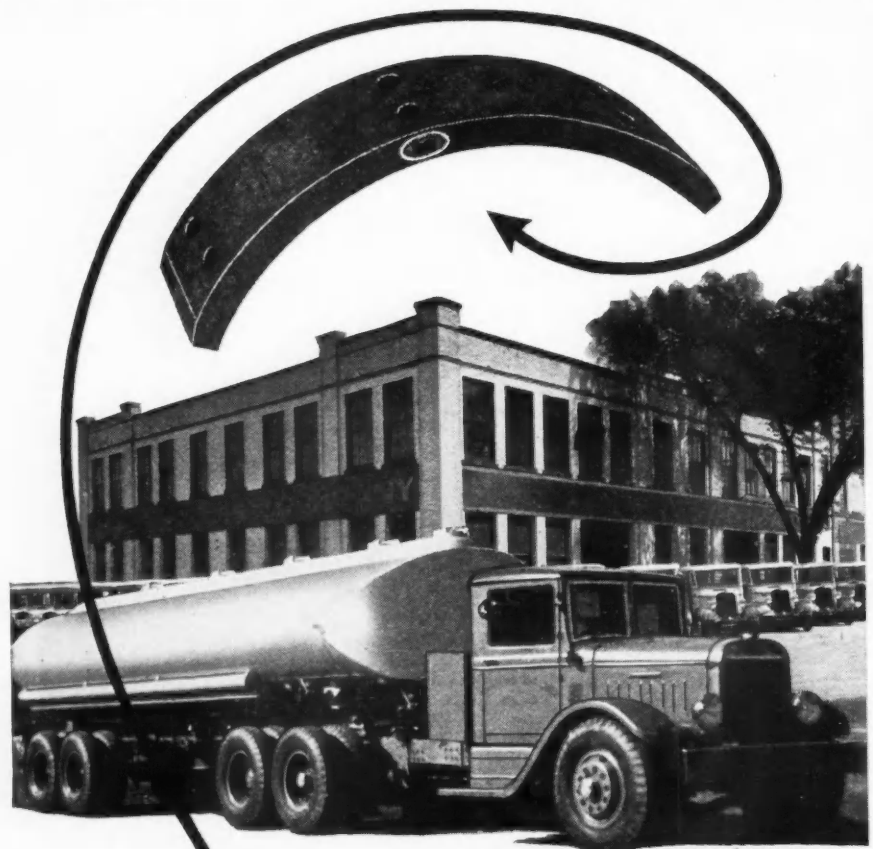

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"AND IT PRACTICALLY ELIMINATES PREMATURE FAILURES"
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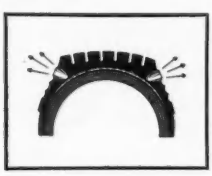
HEAT VENTED

Here is One Reason

SEIBERLING "SAF-FLEX" CORD. The carcass of this tire is "HEAT-PROOFED." It is built of "Saf-flex" —a revolutionary new cord developed by Seiberling— that retains its strength and stamina even under extreme heat and service conditions. This new "Saf-flex" cord develops less internal heat and withstands an unbelievable amount of strain and abuse. Unlike synthetic cords, its efficiency is not affected by the moisture that may get in through tread or sidewall cuts.

Here is Another Reason

SEIBERLING "HEAT-VENTING." This is the *only* truck tire on the market that actually EXPELS the heat that causes most blowouts. As the tire rolls under the weight of the vehicle, patented "heat-vents" open and close, pumping out hot air and pulling cool air right down to the body of the tire.

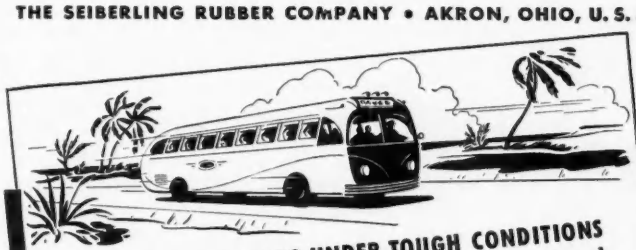


**In exhaustive comparative tests the exclusive features of this remarkable tire increased mileage 105% over former constructions.*

Here is Another Reason

SEIBERLING THERMO-WELD CUSHION GUM. Between the tread and carcass of this new Tire there is a new compound, developed by Seiberling engineers. This Thermo-Weld Cushion Gum literally welds the tread to the carcass. It resists the disintegrating effect of friction heat, and is a reliable safeguard against tread separation.

THE SEIBERLING RUBBER COMPANY • AKRON, OHIO, U. S. A.



PHENOMENAL RECORDS UNDER TOUGH CONDITIONS

In high speed runs on Florida's Tamiami Trail, and gruelling tests in Texas, we have been unable to break down these new "Heat-Vented" Seiberlings with ordinary service. Drastic overloads and extreme under-inflation were necessary to produce tire failure.

Let us send you the facts on these remarkable tests and full details of how these revolutionary new tires performed. Just mail us a letter or post-card TODAY—ask for our "Heat-Vent" folio.

SEIBERLING

HEAT VENTED TRUCK TIRES

BUILT WITH SEIBERLING "SAF-FLEX" CORD

Cash In ... ON THESE THREE ACES

FOG LAMPS

THREE SURE WINNERS

1. MODEL NO. 855
A super fog lamp with special lens and reflector. America's most beautiful and sturdiest fog lamp. 7" diameter.

2. MODEL NO. 857
Same as Model No. 855 but with 6" lens.

3. MODEL NO. 850
Popular priced and a marvelous value. 6" lens.

Model No. 855 Fog Lamp de luxe

Write for new Catalog No. 38 — a unique manual ready for you.

Members by Invitation — Rice Leaders of the World Association

The K-D Lamp Co.
CINCINNATI, O.

FOR LOW COST MAINTENANCE

Specify BLOOD BROTHERS UNIVERSAL JOINTS

Whatever your requirements, if your problem is to transmit power at an angle, our field and factory experience of more than 30 years is at your command. Our Engineering Department will gladly submit quotations covering your requirements.

BLOOD BROTHERS MACHINE COMPANY
DIVISION OF STANDARD STEEL SPRING COMPANY
ALLEGAN • • MICHIGAN

"MUTINY"

(CONTINUED FROM PAGE 62)

was to make possible affiliation with the A.T.A. if the amendment to the A.T.A. by-laws, discussed above, were adopted.

Although a compromise was effected with regard to the amendment, Contract Carriers, Inc., as it stands, remains a dormant threat to A.T.A. unity, and an insistent reminder that the A.T.A. do something about the compromise suggestions. The corporation represents a framework around which a national association of contract carriers can be constructed. The by-laws stipulate that any contract carrier, as defined in the by-laws, shall be eligible to apply for membership in the association. A contract carrier is defined thus:

"Contract carrier as used herein is hereby defined to mean any individual, partnership, corporation or association (1) which possesses authority issued by either a state or federal board or commission to operate as a contract carrier, or (2) which has an application on file with a state or federal board or commission for authority to operate as a contract carrier, in respect of which application no final determination has been made by such state or federal board or commission, or, in the event of appeal of a decision of such state or federal board or commission, by the courts."

Charles P. Clark, of St. Louis, former NRA deputy administrator of the trucking code, was elected head of the contract carrier group. He declared that the future of contract carriers would be decided within the next several months, and urged active participation of contract carriers in hearings and litigation to protect the advantage inherent to shippers and the public in their type of operation.

Local Cartage Meeting

The meeting of the local cartage group resulted in a decision to attempt to organize local cartage operators as a division within the framework of the A.T.A. There was a definite decision to form a division within the A.T.A. but the success of this move depends largely upon the reception it will receive from local cartage groups not now members of A.T.A. when rules and by-laws for the division are submitted to the industry and acted upon at a meeting to be held in Chicago within 60 days.

A considerable group of cartage operators who have local organizations, but who are not members of state associations affiliated with A.T.A., and consequently are not themselves members of A.T.A., was hopeful that the amendment proposed by the contract carriers would be adopted. These operators favored a national organization of local cartage interests. For its membership it would draw upon local associations of cartage men and would take individual members from localities where no local groups exist. It was part of their plan to pay into the A.T.A., upon affiliation, a mutually agreeable percentage of dues collected. These operators contend that local cartage interests operate 80 per cent of the vehicles used in for-hire transporttation; that each city has its own peculiar local cartage problems; that some solutions of local cartage problems are admittedly antagonistic to common carrier interests; and that the solutions local cartage men

favor could not be promoted by the A.T.A. because it is dominated by common carriers.

One purpose of the Chicago meeting will be to win this group's active participation within the fold of the A.T.A. Hugh E. Sheridan, of New York City, chairman of the embryonic Local Cartage Division, has this job as his first and most important assignment.

Private Carrier Meeting

In contrast with the good attendance at the other group meetings, the private carrier division meeting attracted eight private carriers—five from Pennsylvania, one from Illinois, one from Massachusetts and one from West Virginia.

The discussion centered on the possibility of coordinating the activities of the National Council of Private Motor Truck Owners with the Private Carrier Division of the A.T.A. Several truck association officials present expressed the fear that the drive of the National Council for private carrier members would have a tendency to split existing state truck associations. A representative of the National Council assured the group that such was not its intention; that the by-laws stipulated cooperative action with the A.T.A., and with existing private carrier groups in state associations. He pointed out, however, that there was only a handful of state associations in the United States that had private carrier groups of any size in their membership.

A resolution was passed which, in effect, was a prediction that the A.T.A. would not support the National Council of Private Motor Truck Owners if it solicited membership of private carriers who are not members of a state association affiliated with the A.T.A. This attitude is entirely consistent with that taken toward contract carriers and local cartage requests that the by-laws be amended to permit them to organize their groups along national lines. Back of the attitude in each case is the fear that such arrangements would disrupt state associations.

John A. Hassey, of Cities Service Oil Co., Boston, Mass., was elected chairman of the A.T.A. Private Carriers Division, and Gavin Laurie, Atlantic Refining Co., Philadelphia, vice-chairman.

At the opening session delegates to the convention heard Ted V. Rodgers, who was elected president for the sixth time, reviewed the activity of the national organization during the last year and made a strong plea for unity.

"We can go forward and build collectively and individually," he said, "only if we present a strong front, backed by concerted effort."

At the annual meeting of the Board of Directors, a number of resolutions were passed. In these the A.T.A.:

1. Opposed the amendment to the Motor Carrier Act which would exempt from federal regulation and place under state control those companies whose vehicles operate in interstate commerce without crossing state boundaries.

2. Urged the I.C.C. to issue no more certificates or permits except in accordance with a classification order, definitely specifying in each certificate or permit the particular type of service authorized to be rendered.

3. Recommended that the I.C.C. draft a committee of operators to cooperate with it in identifying and defining various classifications of service until definite specifications with regard to class of service were formulated.

(Turn to Page 66, Please)

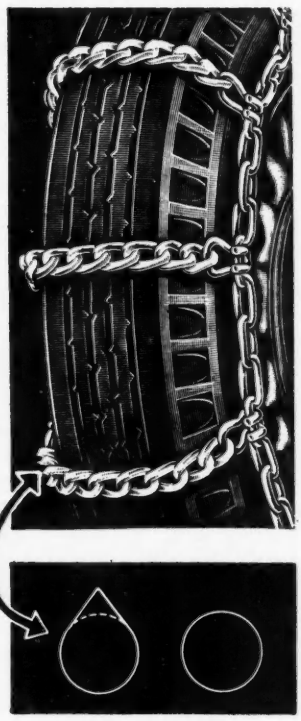
CLAW TRUCK CHAINS

can take it!

20% more CLAW alloy steel biting at the point of traction

GIVES LONGER, SAFER MILEAGE

Yes, CLAW chains can take the terrific punishment of truck transportation because they are *truck* chains right down to the alloy that goes into every last link.



No chain made can equal the holding power of the exclusive CLAW cross links—links with a protruding wedge of CLAW-alloy steel (toughest metal known to chaindom) that actually *CLAWS* into the roadway for a determined grip. (See diagram to the left.) This wedge, giving 20% more steel to each cross chain, is kept constantly sharp by the honing effect of the pavement.

CLAWS are quick on and sure on, thanks to the improved Blue Boy Fastener. Special Indented Rim Chains eliminate play and prevent excessive breakage between cross chains and rim chains.

Keep your schedules on time in all kinds of weather and keep your chain costs down: Specify CLAWS all around.

COLUMBUS-McKINNON CHAIN CORP.

General Offices: TONAWANDA, N. Y.

Plants at St. Catharines, Ont. Can. *and* Vereeniging, So. Africa

CLAW★ TRUCK CHAINS

When writing to advertisers please mention Commercial Car Journal

PLYMETL "delivers the goods"!

5 OUTSTANDING PLYMETL ADVANTAGES PROVED ON GRUELING DELIVERY SCHEDULE OF CHICAGO HERALD & EXAMINER

● Says Charles D. Heile, President, H. McFarlane & Company: "Repeated cost studies have shown that Haskelite Plymetl is the most *economical* and *satisfactory* panel we can use for the Herald & Examiner delivery trucks.

"(1) Less labor is involved than is required when sheet steel panels are used. (2) There is a substantial weight saving which assures longer life for the truck chassis. (3) Because the sides of trucks are perfectly smooth valuable space is saved, (4) the danger of rubbing the newspapers, which must be loaded and unloaded at top speed, is eliminated, and (5) the outer side of the truck body is much better looking because it is completely free of rivet or bolt heads. As final proof of economy, many of the Herald & Examiner truck bodies have been in operation over 200,000 miles and have been used on three different chassis."

To make sure you'll get these important advantages in any commercial body you buy, ask for Plymetl construction.

HASKELITE

HASKELITE MANUFACTURING CORPORATION
208 W. Washington St., Chicago, Ill.
Offices in Detroit, New York, Los Angeles

(CONTINUED FROM PAGE 65)

4. Favored legislation placing express and forwarding companies under definite regulation.

A resolution to have the Railway Labor Act amended to include motor carriers in interstate commerce in order to prevent cessation of service until all possible methods of dealing with a labor dispute have been exhausted, was referred to the Executive Committee for study.

Re-elections, in addition to those of President Rodgers, were H. D. Horton, first vice-president; Fred O. Nelson, second vice-president; Henry E. English, fourth vice-president; Lewis A. Raulerson, treasurer, and Chester G. Moore, secretary. Orrin H. Scott is third vice-president.

These officers and regional and divisional vice-presidents, all of whom comprise the Executive Committee pictured on page 21, are: Seated, left to right—J. H. Harriss (Colo.), Henry E. English (Tex.), John W. Blood (Kan.), H. D. Horton (N. C.), Ted V. Rodgers (Pa.), L. A. Raulerson (Fla), Allan J. Wilson (Mass.), M. R. Buhner (Ky.), Walter Mullady (Ill.), Chester G. Moore (Ill.). Standing, left to right—O. H. McAlister (Tex.), Hugh E. Sheridan (N. Y.), O. H. Scott (Calif.), Charles P. Clark (Mo.), Leland James (Ore.), J. A. Hassey (Mass.), Earl N. Cannon (Wis.), Merle Fullerton (Ind.), Fred O. Nelson, Jr. (N. Y. C.), W. H. Brearley (Pa.). Absent—Walter F. Carey (Mich.), James B. Godfrey, Jr. (Mich.), and James P. Clark (Pa.).

AFTER HOURS

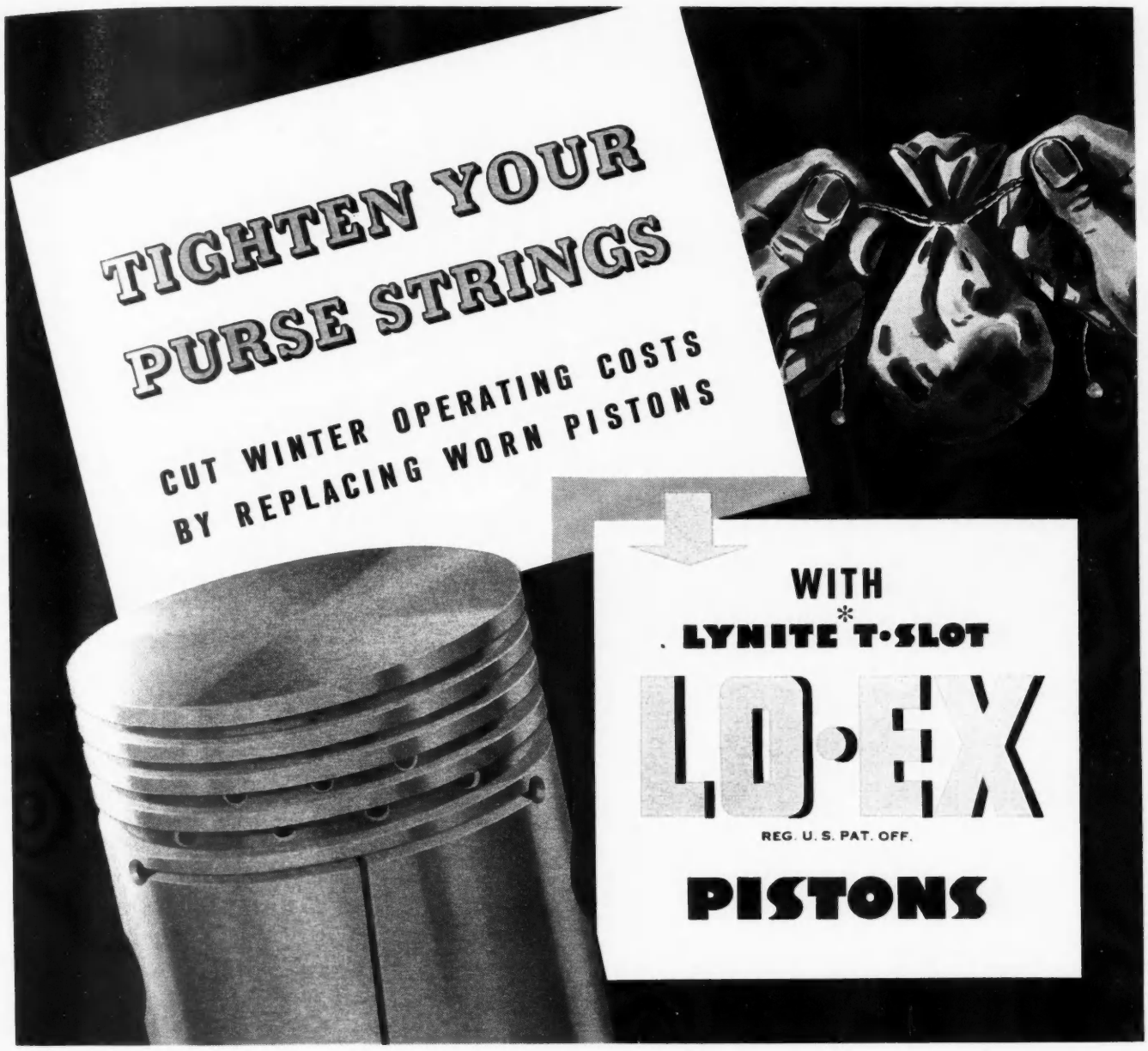
(CONTINUED FROM PAGE 32)

school-boy of today may be the truck driver or the truck owner of tomorrow; and that he certainly will be the voter. Let the youngsters pick up all the literature they can lay their hands on; let them crawl in and out of cabs and bodies; show them the intricacy of 12-speed transmissions; satisfy their curiosity about deisels. But at the same time make certain that they know what part the butcher, the baker and the candle-stick maker play in his life and how much these servants of his pay in payroll costs, taxes and fees for the privilege of serving him.

Such a show should be a non-profit enterprise. It should be run by the industry for the industry. (This is not intended to be a reflection on the integrity or the motivating spirit of those who conducted the shows in the recent past. They certainly were not motivated by the spirit of personal gain.) An educational program should aim for a dividend in the form of public good-will toward the truck industry. If that accrued the industrial dividends would be sure to follow.

Such a show to be effective as an educational effort, should not play in the same city or the same locality year after year. The educational task is a national one. Therefore the show should play a different city each year —moving first to the locality that needed its influence most. It should play to the public in the South, the Southeast, the Southwest, the Mid-West, the West, the Northwest, the Pacific Coast, the North and Northeast. It should not concentrate exclusively on centers of greatest truck registrations. There are centers where the industry could do itself an equal or greater amount of good by fostering increased registrations.

Leaders admit that a tremendous job of educating the public confronts the truck industry . . . has confronted it for years. Truck shows certainly could be used to help the industry out in this respect. Let the truck shows educate, and the education will bring in the business.



Rebore out-of-round, tapered cylinders and replace worn pistons with Lynite T-Slot LO-EX Pistons. Your engines are restored to a like-new condition; no wasting of power with short-lived, friction-causing gadgets. Engines are economical of fuel and oil, and they're good for thousands of miles of low-cost service.

The lighter weight of Lynite T-Slot LO-EX Pistons reduces bearing pressures; bearings last longer. These pistons have low coefficient of expansion, permit close clearances, insure maximum heat flow. Oil and gas consumption, and carbon formation, are all reduced to a minimum.

ALUMINUM COMPANY OF AMERICA, 1916 Gulf Building, Pittsburgh, Pennsylvania.

Reg. T. M. Aluminum Company of America

LYNITE LO-EX PISTONS—A PRODUCT OF

ALCOA · ALUMINUM

CAST ONLY BY ALUMINUM COMPANY OF AMERICA

CURVES

(CONTINUED FROM PAGE 29)

makes sure that the open hatch on the truck mixer body registers with the delivery chute. Weighed quantities of sand, gravel, cement and water are dumped into a hopper above, which, after turning a few minutes, rears up on end and dumps the batch down the chute.

Trucks Get Beauty Treatment

After getting his load the driver moves up so that his truck is just clear of an overhead platform where he battens down the hatch, climbs up to the platform and hoses down the truck until all traces of spillage are removed. He then engages the power take-off arrangement for revolving the body and is on his way.

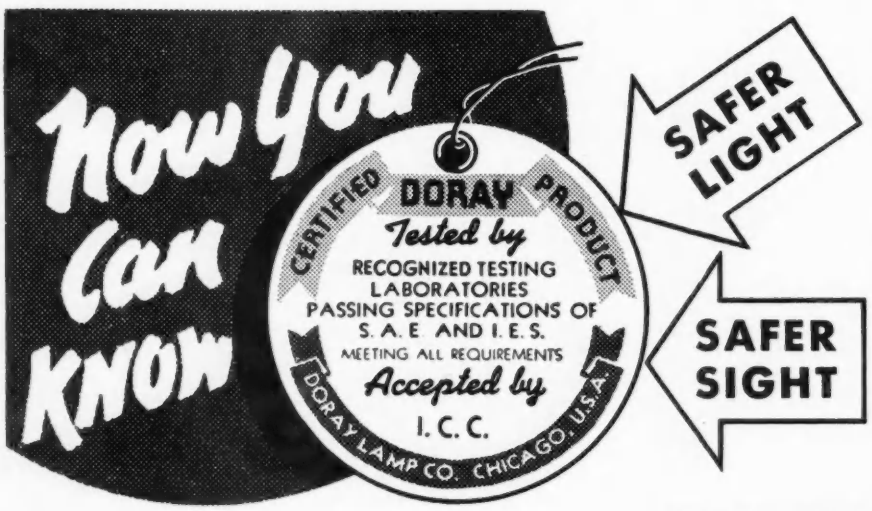
This hosing operation starts one to thinking about how the appearance of the trucks can be maintained at such a high standard. The trucks are painted in cream and they compare not one bit unfavorably with an ice cream or dairy fleet. Mr. Smithers explains that each truck is hosed down, as previously outlined, after each loading. Each driver is allowed some time at the close of the day for further washing, the amount of time depending upon the kind and amount of delivering he has been doing during the day.

If a truck starts to accumulate concrete or dirt the driver is soon made aware of his shortcomings but this is not often necessary because the drivers of the Warner fleet have to be pretty high-class fellows. One of the reasons for this is that they must use judgment on every delivery. Building contractors frequently want them to dump their load in places where it takes judgment to get in and out with a whole skin and truck. This judgment must include the ability to say no when going in means an overturned truck or one bogged down with 6 cu. yd. of concrete still on board. The customer must be kept in a reasonably happy frame of mind when refusals are necessary to prevent the criticism of the boss for stuck or overturned equipment in someone's excavation.

The type of man who can do these these things usually takes pride in the piece of equipment which is assigned to him and every driver is responsible for one truck at Warner's. Mr. Smithers is authority for the fact that a truck goes "downhill" fast when, for one reason or another, it gets to be an extra or has several drivers. Supplementing the efforts of the drivers in keeping the trucks looking up to the mark is a two-man paint shop and a two-man cleaning shop. Trucks are cleaned with a prepared chemical and steam plus air-operated chipping tools. Two men can put three trucks in the paint shop each week.

In the paint shop the pressed steel panels such as cab, fenders and hood are roughed up with an air-operated wire brush. This is done because experience has shown that paint sticks much longer on the roughened surface. It is not necessary to perform this operation on the iron body which is rough enough in the natural state. Once the roughing is done one coat of a commercial preparation is put on, followed by a coat of primer and two coats of color and then a coat of clear, all

(TURN TO PAGE 70, PLEASE)



These Products Are SAFE

Do-Ray's New Directional Signal *Is Certified*

The Do-Ray Nobby Reflex Signal *Is Certified*

Now you can be sure the foglites, directional signals, stoplites, flares, and other safety devices you use are safe. You can be sure they're built right to give low operating costs per mile.

These tags CERTIFY that the product has passed recognized laboratory tests. They are now attached to every Do-Ray product certified as to Safer Light—Safer Sight.

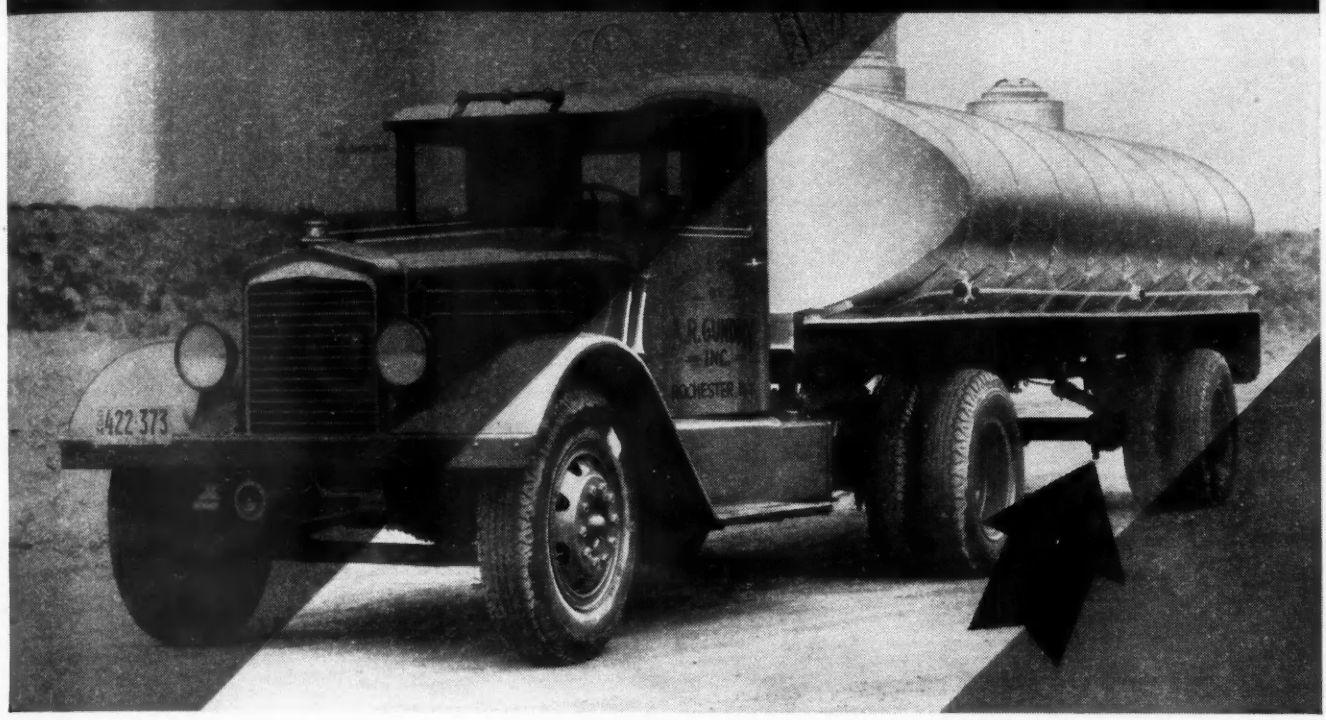
For the first time you can buy safety lighting equipment with the full assurance of quality and service attached to every item. Get complete information now. Ask your jobber or write

DO-RAY LAMP COMPANY
1458 S. Michigan Ave., Chicago

DO-RAY

CERTIFIED SAFETY LIGHTING AND REFLECTING EQUIPMENT

700,000 MILES
AND STILL ON THE JOB!



Timken Tubular
TRAILER AXLES

● **Mr. F. J. Decker, President Diesel Motors, Inc., East Rochester, N. Y., writes:** "Here is a photo (above) of one of our Timken equipped trailers, with a Timken Tubular Trailer Axle (Model T-25000-W), that has seen over 700,000 miles of service. Despite unusual punishment, this Axle is still on the job! It has never been out of commission for any major service, and the Brakes have given such service that the owners just don't think about them any more . . . They have gotten as high as 60,000 miles out of one set of brake blocks. The payload is 4,120 gallons of gas or fuel oil; trailer and tank weight 10,327 pounds. I might add that the Timken T-25000-W Tubular Axle is the only type that has actually been dependable under this load."

(Signed) F. J. Decker

- **Weld-Bilt for strength, safety.**
- **Butt-welds guaranteed for life.**
- **Exceptional rigidity prolongs tire life.**
- **6 capacities to meet every trailer need.**
- **Brakes in several sizes and types.**
- **Precision engineered and built by Timken.**

THE TIMKEN-DETROIT AXLE CO.
DETROIT, MICHIGAN

(CONTINUED FROM PAGE 68)

by spray. Green trim is brushed on and decalcomanias identify the truck for the public. This work is done by two painters who manage to keep up with the cleaners. Two years is the repaint schedule with very little touch-up work done at any time.

Shop Inventory Follows Business Curve

The mechanical shop is using the recession in the building business to very good advantage. Included in the fleet are trucks 15, 16 and 17 years old. When the demands on the fleet were such that 95 per cent of the trucks had to be on the road at all times a heavy unit replacement inventory was built up against them. Transmissions, engines, axles, generators, starters, etc., could be drawn from the stockroom and substituted and the truck started on its way. Now, when the trucks can be spared from service a little longer, the replacement units are being permitted to wear out. For instance, when a truck needs a new water pump bushing, it comes into the shop and it gets a new water pump bushing. Chances are that there is no spare water pump assembly in stock nor will one be added for the older models.

Thus as the old trucks near the end of their useful life the shop is carefully using the lessened demands upon the fleet to cancel out the inventory of spare units and expensive parts. When a unit dies a natural death it is junked and not replaced and when a wearing part of a unit needs attention it gets that attention while the truck waits. Repairs have replaced unit replacement for the old models. This will continue until Warner's have seen the last of the outdated trucks, some of which still show a remarkable amount of life, which is a tribute to the thoroughness of the maintenance through the years.

Unit replacement has not been dropped as a policy, however. Thirty-eight trucks of one make were bought during 1935, 1936 and 1937. The ones delivered during 1935 and 1936 had one type of transmission. When it came time for 1937 deliveries the manufacturer wanted to send trucks with a different transmission. Mr. Smithers would not accept the change, not that he did not believe that the newer transmission was somewhat more modern and generally better, but the other transmissions had been perfectly satisfactory. He did not believe that the change would be worth anything like the cost of two spare transmissions instead of one to service 38 trucks when the time came to go into unit replacement again. Mr. Smithers feels that the amount of unit replacement work that will be done in the future will depend upon the amount of efficiency he must get out of his trucks. When they are needed on the road again 95 per cent of the time he will be up to his ears in unit replacement.

Periodic Inspections Foil Trouble

None of this should be construed as meaning that the Warner maintenance department is courting road breakdowns by lack of periodical maintenance. All trucks are lubricated at 1000 miles or under and are inspected mechanically at mileages between 3000 and 4000 miles. Once

(TURN TO PAGE 72, PLEASE)

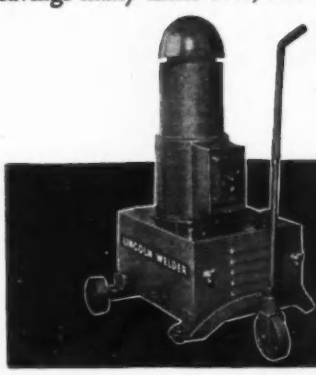
"HERE'S WHY I PREFER ARC WELDING"

A 150-amp. "Shield-Arc Jr." used by a large contractor at Austin, Texas. The portable rigging was built by the user.

● "I have found that electric welding gives a better grade of work and is much faster, cheaper and more convenient to use than the other welding process," says a large fleet operator at Austin, Texas.

"With our Lincoln Welder we are able to weld a wider range of work, including light sheets as well as heavy frames. We seldom have to dismantle parts to weld them with this outfit, and can weld next to painted surfaces without marring the finish. This welder has paid for itself out of cost savings many times over, and is of great value because of the delays it forestalls."

The Lincoln Welder for fleet repair shops is of D. C. motor generator type, permitting it to be used for the welding and hard-facing of metals and alloys of many types. It goes to work at the push of a button, and is just as handy to use and just as dependable as your drills or other electric tools. Lincoln's large scale production brings you this outstanding welder for less than $200 complete with portable parts. Consult the nearest Lincoln office for details or mail the coupon.



THE LINCOLN ELECTRIC CO.

Largest Manufacturers of Arc Welding Equipment in the World

THE LINCOLN ELECTRIC CO.
Dept. AF-556, Cleveland, Ohio

Send a free copy of Bulletin 314 describing the Lincoln 150-amp. Welder.

Name _____ Position _____

Company _____

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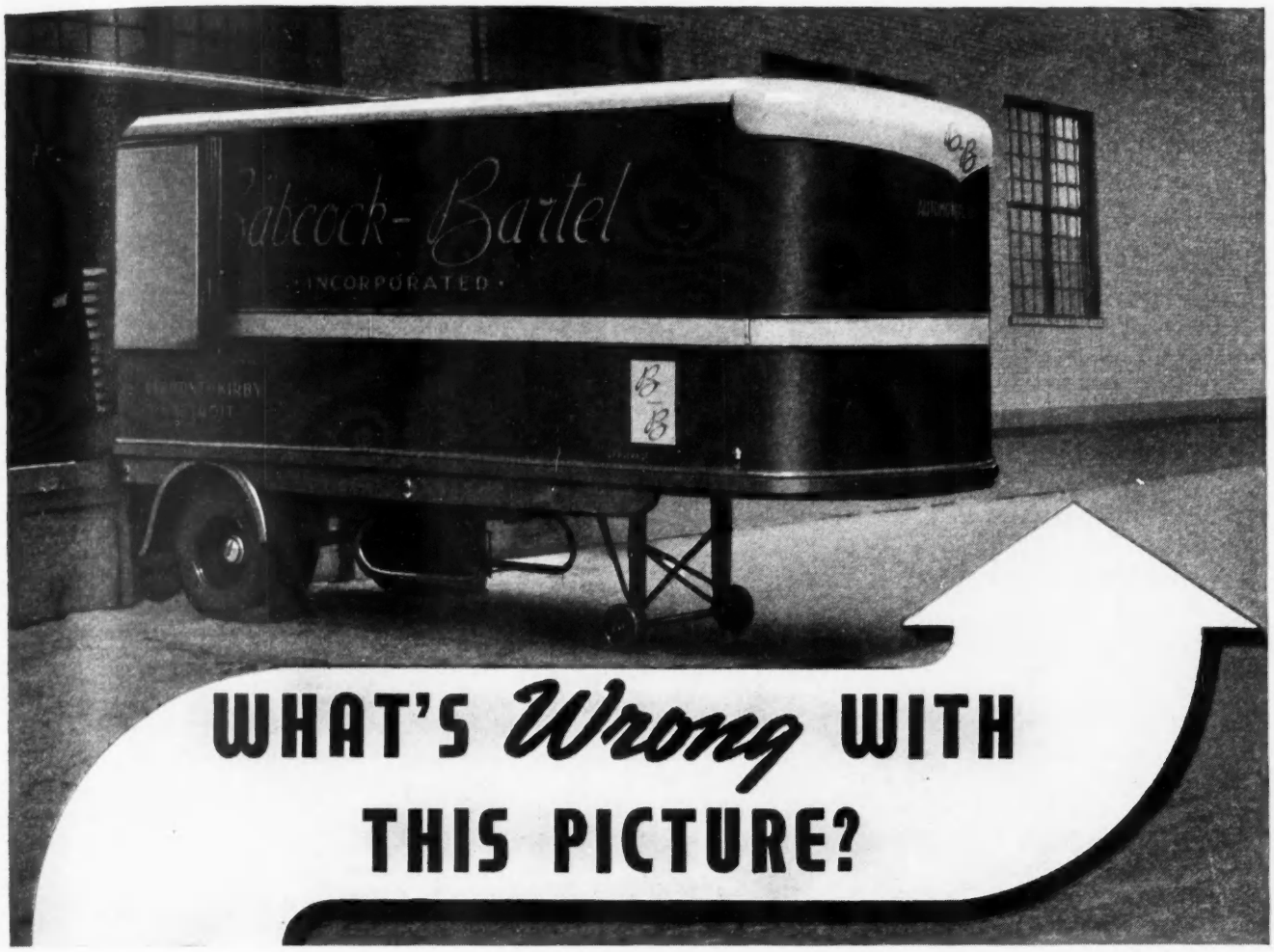
City _____ State _____



WHAT'S *Wrong* WITH THIS PICTURE?

There's no truck! But that's not wrong—it's the way money is saved. The truck is on the road with another Fruehauf Trailer—it's not idling while this one is being loaded.

AND here's another amazing thing: the truck used to pull this 8-ton payload has a rated capacity of only 1½-tons!

Why is this possible? Because *any motor truck you operate, if used as a tractor and coupled to a Fruehauf Trailer, can easily haul two to three times its normal load capacity.*

You don't increase the load usually *carried* by the truck; you put the extra load behind and make full use of the truck's *pulling* power—so that all the power is put to work.

These two factors alone—(1) no truck need idle at the loading dock and (2) each of your trucks hauls more than twice its normal load—explain why a 40% saving in your transportation costs, through the use of Fruehauf Trailers, is a conservative estimate.

Why not figure this saving into your 1939 budget? Word from you will bring a Fruehauf man to your office. He'll study your present set-up and submit a definite recommendation. His services won't obligate you—they should have a very helpful influence on your earnings for 1939. May we work with you on this basis?

World's Oldest and Largest Manufacturers of Truck-Trailers

FRUEHAUF TRAILER COMPANY

10912 Harper Ave. - - Detroit, Mich.

Sales and Service In Principal Cities

FRUEHAUF TRAILERS

"Engineered Transportation" REG. U. S. PAT. OFF.

MORE FRUEHAUF TRAILERS ON THE ROAD THAN ANY OTHER MAKE

CURVES

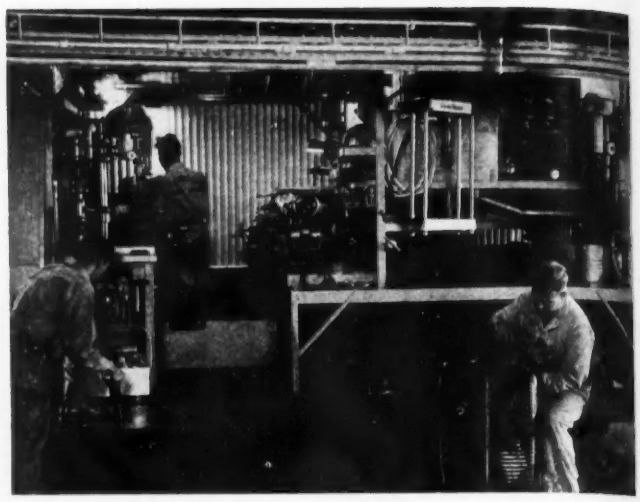
(CONTINUED FROM PAGE 70)

each week the managers at two outlying points call up and tell all of the things they think are the matter with the trucks at their garages. The stock clerk makes up a package of parts that are indicated and the next day a mechanic goes to the garage loaded for bear. He inspects the trucks and if the manager was at all accurate the mechanic can take care of all of the things that demand attention. After some practice the system has been made to operate very well. All heavy work comes to the main shop and engines are rebuilt on an "as needed" basis but get a thorough going over, which is about two years, or about 25,000 miles—but tough miles.

Five mechanics man the floor and Smithers supervises and fills in as machinist or whatever is indicated. One man takes care of the office work and stock room. Tire work is sent out but this will undoubtedly be discontinued when more pneumatic tires replace the cushions. Incidentally, Mr. Smithers has not found pneumatic tires to be any great advantage so far as maintaining a truck is concerned. In some kinds of mud he has found that when a cushion-tired truck is mired a pneumatic-tired truck cannot even get into the spot to help it. In other kinds of mud the pneumatic tire gives better traction than its forerunner.

The trucks are all heavy-duty jobs and all of the newer ones are six-wheelers with a maximum load of 6 cu. yd. of concrete. There is some excitement once in a great while when, due to green cement or delayed dumping, the concrete sets in the truck body. The excitement is caused by the fact that some one is going to be elected to do about 80 hours of chipping with an air tool in the body, a job for which nobody yearns.

Incidentally, if you want to know how a fleet manager spends his spare time, this one flies and maintains his own airplane—a Gypsy-Moth. He brazenly admits that he has kept no cost records on it because it comes under the heading of fun, not business, and he does not want to know how much it costs.



Couse Mobile Workshop on display at the show

NATIONAL TRUCK SHOW

(CONTINUED FROM PAGE 19)

tinued in 1½ to 5-ton models.

Door-to-door delivery trucks occupied prominent space and seemed to receive more attention than they have in previous years. Both Diamond-T and Reo had new package cars on display, which will be described in detail in COMMERCIAL CAR JOURNAL when full information is available.

The Pak-Age-Car Corp. displayed two models, both powered by a 4-cylinder Lycoming engine of 133-cu. in. piston displacement. The engine develops 32 hp. at 2400 r.p.m. and the maximum governed road speed is 28 m.p.h. Fuel consumption is rated at 1 qt. per hour. The model 91 has a 90 in. wheelbase giving 20 cu. ft. of load capacity in front of the driver and 125 cu. ft. behind him. The model 117 has 116-in. wheelbase, with the capacity in front of the driver remaining the same and 192 cu. ft. to the rear of the driver. The powerplant is in the rear.

A new, larger Walker Dynamotive model, called the model 515, was exhibited by the Walker Vehicle Co. as an addition to its line of door-to-door units. This unit is rated at 10,000 lb. g.v.w. and has a chassis weight of 4000 lb. It is powered by a Chrysler engine of 201-cu. in. piston displacement. Horsepower is 72 at 3200 r.p.m. Wheelbase is 112 in. and overall length, including bumper, is 187 in. It is, of course, a gas-electric with the electrical units of the power transmission system being manufactured by Walker. Hydraulic

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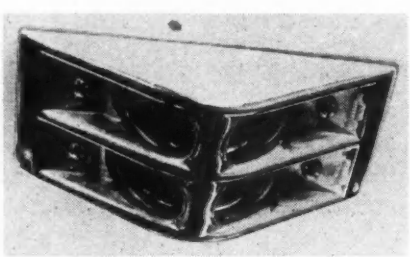
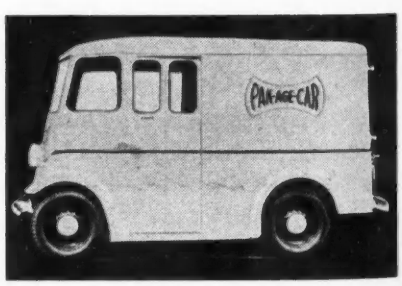
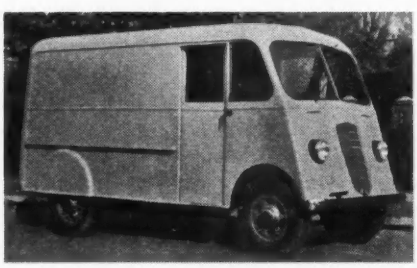


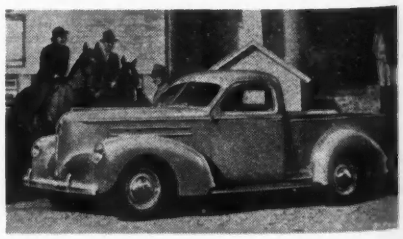
Brown's new Mark-O-Lite



New Pak-Age-Car model



Diamond-T Dor-To-Dor



Studebaker's new coupe express

U. S. Frees New Cable From Secrecy for Use
Washington, Oct. 19.—(AP)—A United States Bureau of Standards Scientist reported today the development of a new low-resistance electrical cable for use in automobiles and airplanes.
The cable, used to connect the storage battery, starter and ignition system, has been a military secret for the last three years while it was being tested.
Dr. Melville A. Peters, physicist at the Bureau of Standards, developed the cable which is made up of seven strands of stainless steel wire.

...and now Sterling Offers You

Sterling Steelductor

Stainless Steel Ignition Cable Sensation

● If you'd like to find out *in advance* how Steelductor, the revolutionary new 7-strand stainless steel ignition cable, is going to work on your units—ask your Sterling jobber to drop around with the Steelductor Demonstrator.

You'll see Steelductor working side by side with copper cable, both plugged right into the distributor of your own truck, as shown in the picture above. You'll see Steelductor click off the sparks like a machine-gun, while the copper cable skips and misses, or cuts out completely at high speeds and at low, idling speeds.

Some of Steelductor's definite advantages are: **1.** Spark discharge with lower battery voltage. **2.** More power for hard pulls in low gear. **3.** Lower idling speed. **4.** Less burning of spark plug electrodes. **5.** Decreased burning of breaker points. **6.** Less misfiring from fouled plugs. **7.** Avoids internal corona. **8.** Minimizes effect of heat on insulation.

Call your Sterling jobber today, or send coupon below for Steelductor sample and jobber's name.

THEY'RE TURNING TO
Sterling Steelductor
IGNITION CABLE
"AN AUTO-LITE PRODUCT"

STERLING CABLE CORPORATION • PORT HURON, MICHIGAN
A Division of Electric Auto-Lite Company

STERLING CABLE CORPORATION, *Port Huron, Michigan* CCJ

Please send sample of revolutionary new Sterling Steelductor Ignition Cable and give me the name of a Sterling Jobber.

Name .....

Firm Name .....

Address .....

City ..... **State** .....

Dempster Dumpster goes into action

Walker's 515 Dynamotive

IHC Cummins-powered Diesel

NATIONAL TRUCK SHOW

(CONTINUED FROM PAGE 72)

brakes are standard.

Reo displayed a new line of trucks, with many unusual features, covering the entire range of sizes. These will be described in detail in the January issue.

Autocar filled out its line of cab-over-engine models with the models URL and URLS. These two trucks are powered with the Autocar 358 engine and have, respectively, ratings of 20,000 and 25,000 g.v.w.

In the Marmon-Herrington display one of the all-wheel-drive converted Fords sported the Hercules diesel package powerplant.

Two unusual dump trucks to be used in connection with hand-shoveling operations were on display. While not the same mechanically they are to be used in identical work. Both will carry a nest of five 2-yd. containers to the job and distribute them at the points where they are to be filled and will pick them up singly when loaded and carry them to the dumping point. The hoisting mechanism on the Dempster Dumpster, displayed by Dempster Brothers, Inc., is hydraulically operated while the buckets on the Speed Dumper, a product of Speed Dump, Inc., are lifted by gearing from the power take-off, which winds cable on a drum.

Couse Laboratories, Inc., had a spectacular vehicle equipped with a complete machine shop, welding equipment, flood lights and two-way radio equipment. A compressed air supply, acetylene generators, power for arc welding and a 1-ton crane were all incorporated into the design of the unit, which can be used as a mobile airport or a motor transport repair station.

In the Wagner Electric Corp. booth the air brake system drew attention. The new feature was a vibrationless, belt-driven rotary air compressor for supplying air to the brake system. It is a compact unit made to be used on larger trucks than the vacuum-driven compressor which has been up to now the air supply for the Wagner braking system.

Continental Motors Corp. featured its M series of 6-cylinder, L-head engines. There are three engines in this series having respectively 270, 289 and 329 cu. in. of piston displacement. The maximum horsepower of the three engines is 85, 88 and 98.

A new exhibitor, the Brown Equipment Co., showed a new marker light. The light has a visibility range of greater than 180 deg. and if mounted correctly will eliminate four clearance lights per trailer. The lens is made of thick curved glass and is protected by a guard of die-cast metal. It uses two low-current bulbs per light.

In the E. R. Merrill Spring Co. booth a spring life test machine ran continuously for the duration of the show. It was a cam arrangement which flexed the spring 1,250,000 times during the show. The same spring had undergone this same treatment at six previous shows.

Speed Dumper at the show

JACKS

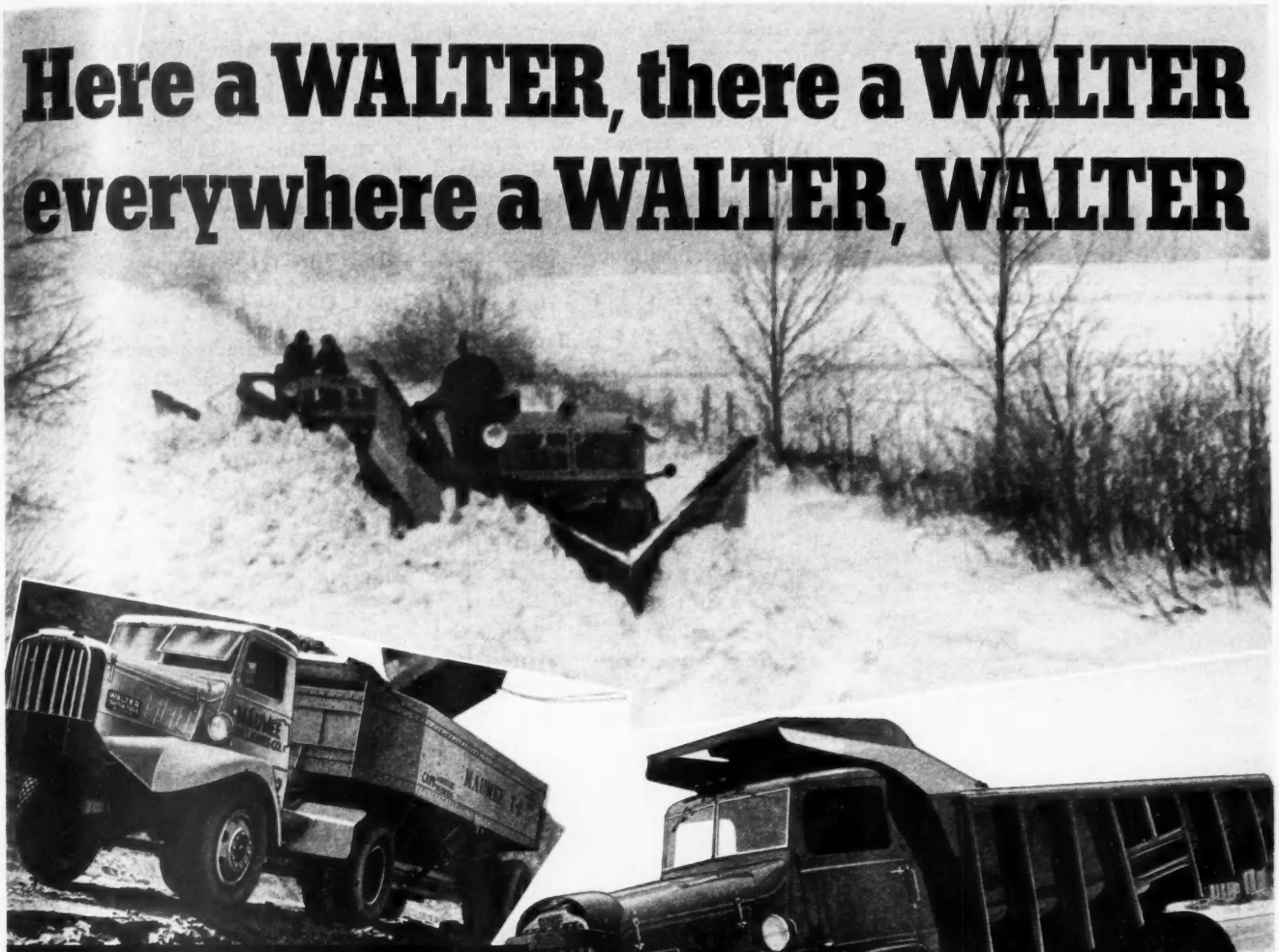
(CONTINUED FROM PAGE 33)

three jacks in three years. This large model is more than enough for a great many jobs, but it is so large it is not apt to be stolen for pleasure car use."

Says another: "Give the mechanics good jacks, also the drivers, and keep them happy when they have to use them; give the drivers bum ones and see how quickly they go to pieces and take it out on the equipment. For the manufacturers let them make a good heavy-duty hydraulic jack and install a safety factor right in its construction. In other words, fix them so that there is no possible chance of them coming down. A pin or wedge or some other device can be run right through the housing and

(TURN TO PAGE 76, PLEASE)

Here a WALTER, there a WALTER everywhere a WALTER, WALTER



"Everywhere a Walter" — well, perhaps not exactly, but Walter Snow Fighters and Tractor Trucks are certainly getting around. Road Building and Maintenance Officials, Bus Operators, Fire Commissioners, Coal Operators, Lumbermen, and others who have "mean" trucking jobs are rapidly learning that there's a great difference in efficiency between Walter Four-Point Positive Drive and just "four wheel drive".

When the loads are heavy and the going is rough, through snowdrifts, mud, sand, and what not, the Walter is in a class by itself. Walter Automatic Lock Differentials and the unique Suspended Double Reduction Drive, insure an operating performance unmatched by rear wheel or ordinary "four wheel" drives.

Send for literature

WALTER MOTOR TRUCK CO.

1001-19 IRVING AVENUE, RIDGEWOOD, QUEENS, L. I., N. Y.

JACKS

(CONTINUED FROM PAGE 74)

then through the shaft, making a positive lock, and this will relieve all the strain on the check and make the jack last that much longer."

"I still think," says another, "that truck manufacturers should equip their trucks with a good jack, possibly one or two tons oversize and operating freely. The trouble I have found with the mechanical jacks today is that you should have three or four hands to operate them.

"As fast as standard equipment jacks are lost or unfit for service, I replace them with hydraulic jacks."

When fleet owners purchase jacks for replacement or additional equipment, they are four-to-one in favor of hydraulic jacks, the survey showed. No less than 87 per cent purchase this type. In making this purchase approximately 70 per cent overlook entirely the brand of jack furnished as original equipment. As a matter of record the products of three widely publicized jack manufacturers enjoy the greatest popularity among fleet operators. The preferences expressed for these three out numbered all other makes combined.

Answering the question of whether or not fleet drivers are expected to change tires on the road, 42 per cent of the operators said that they rely on their own service trucks to change tires and for other road repairs. These fleets are, of course, operating within limited areas, and in numerous occassions indicated that exception was made for longer distance runs. Thirty-three per cent said they rely in part upon independent service stations to service their trucks, a few having prearranged service contracts with key stations throughout their territory. Only 25 to 30 per cent of the fleets reporting rely wholly on their own drivers for changing tires.

Various precautions are taken to prevent theft, but only 20 per cent of all the fleets replying said that they made their drivers financially responsible in case of jack losses.

Typical of the big group who rely on service trucks or outside help to change tires are these comments from operators:

"Our operations are short hauls between Chicago and Aurora. It has been difficult to keep tools and jacks in trucks. Consequently we find it more economical to pay for road service as required."

"Our fleet consists wholly of Ford ½-ton trucks. Each truck carries the jack which is included as standard equipment at the time the truck is purchased. The load consists of bulky merchandise of about ¾-ton average. Because of the few tire troubles on the road (13 in the last 12 months) drivers are permitted to have tires repaired at service stations if there is one handy. Otherwise the driver mounts the spare and turns in the flat at the end of the day to be repaired."

"Maintain own shop—repair shop and tire shop—centrally located and take truck off the street in a hurry. Seventy-five per cent of our truck work is within a radius of 10 miles."

"All our trucks operate within the city limits. Our trucks carry no spare tires or jacks. All have puncture proof tubes. Our tire sizes are standardized—we carry one spare for each tire size only. Our own garage takes care of all road work."

"Due to the numerous service stations in our locality we have always deemed it quicker to call upon a service station whenever any of our trucks have a flat. Also, our boys, being dressed in white, could not easily change a tire without getting dirty, thereby making them unfit to call on the trade."

"Our drivers do not change any tires on the road; they use service garages as we have arrangements made with service stations and garages at intermediate points on our lines."

Reporting on jack equipment in their shops fleetmen indicated by their replies that approximately 50 per cent of all jacks in use were of hydraulic type, 34 per cent hand mechanical, 8 per cent dolly-type hydraulic and 8 per cent dolly-type mechanical.

The average fleet buys 5.66 vehicle jacks and 1.32 shop jacks per year. Extended to cover the 29,750 fleets (of five or more trucks) in the country a total fleet purchasing power of 168,385 truck jacks and 39,270 shop jacks is indicated. Eighty-four per cent of these jacks are purchased from automotive jobbers, the remaining sources including truck and jack manufacturers, chain stores and tire shops.

FINGERPRINTS

(CONTINUED FROM PAGE 27)

very interesting to drivers and are considered valuable for discipline and education. The company has reduced the annual reportable cost of their accidents from $137,000 in 1931 to $15,000 for 1937, with promise of 15 per cent reduction for 1938.

D. D. Gardner, personnel director of Commercial Motor Freight, Inc., Columbus, Ohio, talking on "What Good Are Accident Records?" stimulated a lively debate on "driver fatigue," "off-duty use of company cars," and "keeping drivers interested in their work." He had stated that better accident records by the industry should result in "definitely lower" insurance rates; but he feared that if the impending I.C.C. shorter hours of service regulations should go into effect, it would speed traffic and cause more accidents and a poorer accident showing by the industry. This opened up the question of driver fatigue.

George S. Thompson, safety director of Auto Transports, Detroit, thought that "how drivers use their hours of rest before starting on a trip" is more important than the fatigue of driving; also "what they eat before and during a trip." His company had approached the managers of about 15 eating places along their routes, and all had agreed to give attention to combinations and quality of food served to drivers or supplied as box lunches. For instance, to leave out dill pickles and substitute an orange or lemon; and to make certain their hamburgers were well cooked.

R. C. Haven, safety engineer of Continental Baking Co., New York City, and general chairman of the Commercial Vehicle Section, disagreed. During five years over certain routes, his Company had eleven serious accidents from drivers falling asleep. They reorganized their routes and added three new ones, to shorten runs and lessen fatigue, and during the past several years there had been no additional accidents from this cause.

To lessen temptation for their drivers to use company cars during "off-duty periods," one company had

(TURN TO PAGE 84, PLEASE)

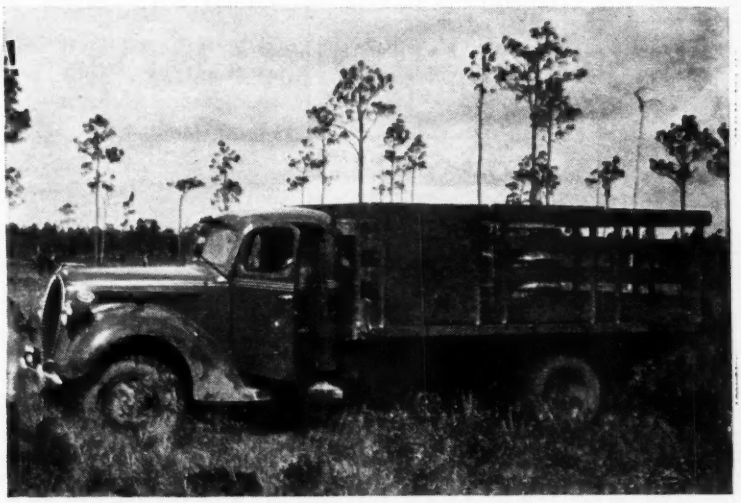
MARMON-HERRINGTON *All-Wheel-Drive* FORD V-8 *for* 1939

MORE "*Umph*" ON THE HILLS!

Yes, "Umph" is the word! When it comes to climbing hills, on hard pavements or out in open country where there are no roads at all, there's no other vehicle on four or six wheels which can even approach the performance of a Marmon-Herrington *All-Wheel-Drive* Ford. The *clinging, grasping, climbing action of the front wheels,* as well as the rear wheels, pulls these vehicles with heavy loads, up and over hills that no conventional truck would dare to tackle.

MORE "*Git*" THROUGH SAND AND SNOW!

Where ordinary trucks have to struggle and creep, "inching" their way through loose sand, dirt or snow, where they lose traction and stall—it is positively amazing to see a Marmon-Herrington *All-Wheel-Drive* Ford go through with sure-footed traction and speed. The enormously increased traction of *all wheels driving* and the speed of these vehicles hustle the snow off more miles of highways. Make desert sands lose their terror.



MORE "*Go*" IN THE MUD!

You'll be astounded, the first time you see a Marmon-Herrington *All-Wheel-Drive* Ford plough through deep mud and water. With power and traction on all wheels, these *trucks, commercial or passenger cars* reduce wheel-spin, slipping and skidding to the absolute minimum. You need "go" *at all the wheels* to negotiate marsh lands, river banks and gravel pits—and Marmon-Herrington *All-Wheel-Drive* Fords have what it takes!

MORE *Truck* FOR YOUR MONEY . . .

Don't let the astonishing performance of these vehicles deceive you about the price! Don't try to guess, or you are sure to guess too high! As an actual fact, you can buy *two* Marmon-Herrington *All-Wheel-Drive* Fords for the price you would expect to pay for *one* four wheel drive of comparable ability. We convert all standard 1939 Ford trucks, passenger and commercial cars to *all-wheel-drive* in our own plants. The work cannot be done elsewhere. Ask for literature and prices.

MARMON-HERRINGTON COMPANY, INC. • INDIANAPOLIS, INDIANA

When writing to advertisers please mention Commercial Car Journal

FREE

48-page Automotive Cleaning Handbook. Goes thoroughly into all cleaning problems connected with truck operation and maintenance. Send for your copy TODAY.

. . . . with MAGNUSOL

The use of MAGNUSOL, the ideal motor and chassis cleaner, in your maintenance shops eliminates long soaking—laborious scrubbing and scraping—inflammable solvents—disagreeable odors—and high material cost *without* sacrificing cleaning results.

MAGNUSOL takes the "cling" out of grease and oil. Spray it on—let penetrate—flush it off with pressure rinse from hose.

Stubborn, dirty grease and oil deposits on cement floors are readily removed with less effort and at lower cost.

Let us show how MAGNUSOL will help you cut maintenance costs as it has for hundreds of other truck operators.

MAGNUS CHEMICAL COMPANY

Manufacturers of Cleaning Materials, Industrial Soaps, Metallic Soaps, Sulfonated Oils, Emulsifying Agents and Metal Working Lubricants.

38 South Avenue Garwood, N. J.

MAGNUS CLEANERS

to a definite driver, under an "and/or" responsibility clause.

Mr. Gardner answered the question, "How do you keep your drivers interested in their work?", by explaining that all their drivers had been promoted from dock workers, and a salary increase was the best "incentive" he knew about. Donald M. Goodwillie, safety director of The Willett Co., Chicago, made a like report, stating that the union agreement provided for higher pay for drivers promoted to their heavier trucks, which offered a promotional incentive carefully watched by their drivers.

Taking Care of Repeaters

Bryant Skeen, safety and personnel director of Pacific Freight Lines, Los Angeles, started off another discussion on "What to do with the Repeater." He defined a "repeater" as one who has had three or more accidents during a single year. He agreed that insurance actuaries usually are able to predict the future accidents of such a driver. But his own company has been able so to "change the conditions" which produce accidents that they can hardly credit their own accident reduction figures. They have developed three special practices to aid them in this program:

First, they post on a bulletin board observational reports of traffic viola-

(Turn to Page 86, Please)

FINGERPRINTS

(Continued from Page 76)

painted their several hundred passenger cars a bright red. Another fleet safety director believed that drivers who can't be trusted in the proper off-duty use of company cars, "are not the kind of men we want working for us." For three years they had been permitting the drivers of their 45 company cars to use them as freely as if they owned the cars, and during that time had only two minor accidents.

Another company had attempted to control their cars through elaborate reports in and out of garages, sent by garage managers direct to the company. But they had decided that the system was working too much toward "training our men in dishonesty," through their conniving with garage attendants in secretly getting the cars in and out, and the plan was abandoned. Also, they had found that their men, for fear of losing their jobs if caught in the off-duty use of company cars, were not reporting all their accidents.

An insurance representative then explained that both the company and the driver could be fully protected, without additional cost, if the insurnace policy were written in the form of the assignment of a company car

Sterling MOTOR TRUCKS

DIESEL AND GASOLINE

GREATER PROFITS

Cost sheets tell the story! Net savings of over $15,000.00 per truck. An achievement of Sterling Diesel powered motor trucks—trucks which have traveled in excess of one-half million miles and are still in operation.

Be sure of maximum returns on investment. Select Sterling motor trucks for superior performance and lower operating costs. Write for full information.

STERLING MOTORS CORPORATION
MILWAUKEE WISCONSIN

BIG ENOUGH

● This is space enough to tell you that Fitzgerald Bulldog Gaskets are best for modern heavy duty service.

THE FITZGERALD MFG. CO., TORRINGTON, CONN.

FITZGERALD GASKETS

AUTOPULSE
ELECTRIC FUEL PUMP

- Uninterrupted Schedules
- Instant Starting
- Greater Economy
- No Vapor Lock
- Added Protection

AUTOPULSE CORP., DETROIT MICH.

KING BEE

THE GREATEST DEVELOPMENT IN FOG LAMPS SO FAR

HY-POWER *Million Dollar* FOG LAMP

Streamlined ● Chromium Plated ● Theft-proof

This big, handsome lamp (7½" diameter) throws a powerful, non-glaring blanket of light capable of piercing the densest fog; with special reflector and lens using only 32 c.p. pre-focused Mazda bulb, delivering nearly 40,000 candle power per pr. Fits 1939 and older cars. Clever fastening seals hinge door air-tight, permitting quick replacement of bulb. Lamp, brass polished chromium plated, bracket and clamps also polished chromium plated. Theft-proof construction. HY-POWER JUNIOR—Similar to above, 6½" diameter, cadmium-plated bracket.

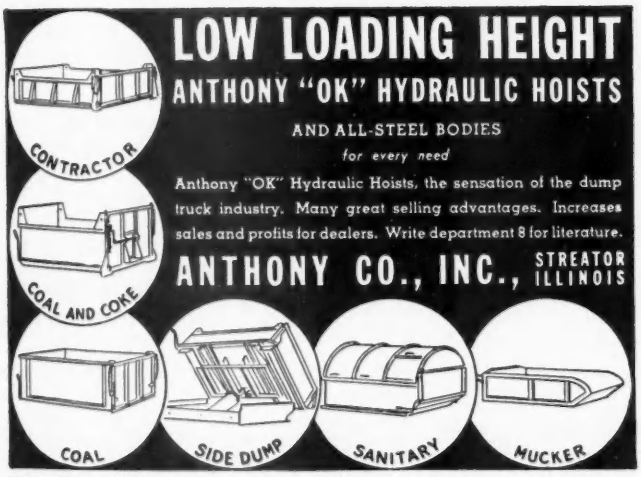
Write for Full Details

AMERICAN AUTOMATIC DEVICES CO.
Harrison, Throop & Congress Streets Chicago

LOW LOADING HEIGHT
ANTHONY "OK" HYDRAULIC HOISTS
AND ALL-STEEL BODIES
for every need

Anthony "OK" Hydraulic Hoists, the sensation of the dump truck industry. Many great selling advantages. Increases sales and profits for dealers. Write department 8 for literature.

ANTHONY CO., INC., STREATOR ILLINOIS



I CUT MY TIRE COSTS PLENTY WITH GOODRICH SILVERTOWNS

Truck owners find that truck tire costs hit rock bottom when they switch to Goodrich Silvertowns. Here's why: Silvertowns have a new invention—Triple Protection—built into the sidewall. It positively checks 80% of all premature failures. It cuts down on tire delays—adds mileage. See a Goodrich dealer for prices.

NO PREMIUM PRICE

Goodrich *Triple Protected* **Silvertowns**
FOR TRUCKS AND BUSES

means you STOP *with the*

TRU·STOP
EMERGENCY BRAKE!

The TRU-STOP Emergency Brake has the powerful, positive action to stop heavily-loaded vehicles within a few feet. Every inch of lining is put evenly, instantly to work. There is no chattering or grabbing. The stopping action is smooth, noiseless, safe, sure.

Self-cooling Ventilated Disc prevents overheating. The lining is kept cool. Longer service life is thus assured.

Protect life, load and property. Conform with law. Install TRU-STOP Emergency Brakes. Specify them on new vehicles. Request details.

AMERICAN CABLE DIVISION
AUTOMOTIVE DIVISION, BRIDGEPORT, CONNECTICUT
AMERICAN CHAIN & CABLE COMPANY, Inc.
Manufacturers of the famous Weed American Bar-Reinforced Tire Chains

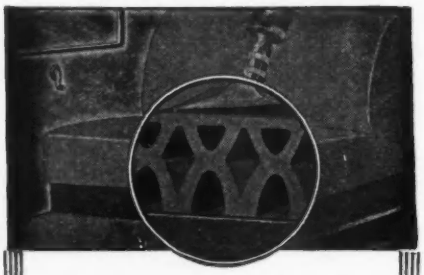
In Business for Your Safety

TRU·STOP *Emergency* BRAKES

TRU·LEVEL OIL CONTROLLER

After exhaustive tests the Tru-Level Oil Controller is being adopted by car and truck manufacturers in production and is also being ordered by fleet owners for installation. It protects equipment and saves money by maintaining a proper level of oil in crank case at all times. It can't go wrong. Manufactured by American Chain & Cable Company, Inc., 12-252 General Motors Building, Detroit, Michigan.

TIME TO SWITCH
To Black Diamond All-Rubber
SEAT CUSHIONS



No better evidence of the superiority of these all-rubber seat cushions and back rests can be found than the greatly increasing number of trucks being equipped with Black Diamonds. Either as a replacement or new equipment they are tops for long life, no upkeep expense, and comfort. Made with the patented diamond grid construction so as to give greater strength and durability—they answer your demand for lower costs. Ask owners about their performance. Ask us about prices.

KARPEX MANUFACTURING CO.
1924 E. 19th Street, Indianapolis, Ind.

WAUKESHA
- Comet Diesel
- Hesselman
- Gasoline
- Hy-Powr
- Ricardo Head

ENGINES

HOISTS BODIES TANKS

HEIL Quality Products

SNOW PLOWS SCRAPERS

MANUFACTURED BY
THE HEIL CO.
FACTORIES:
MILWAUKEE - - - - WISCONSIN
HILLSIDE - - - - NEW JERSEY
Branches and Distributors Everywhere

(CONTINUED FROM PAGE 84)

tions, giving the time, place and circumstances—but without identifying the driver—under the heading "Was It You?" The offending employee thus knows that his violation has been entered on his record, and that the only preventive of other such reports is better driving habits.

Second, they publicize flimsy excuses for accidents under the bulletin board heading, "What Do You Think?"

Third, they write personal letters to accident repeater employees, setting forth details of the accident, the direct and indirect costs to the company, and an appropriate management warning. The letter is addressed to the home of the employee, with the expectation that the driver's wife or mother soon will know the full contents of the letter.

These practices are supplemented by a new personnel relationship. A few years ago, they abruptly took the finger-prints of all company employees from highest to lowest rank. The next morning about 10 per cent of their drivers failed to appear for work! All finger-prints were submitted, through the Los Angeles Police Department, to the U. S. Department of Justice at Washington in the form of driver employment applications. Final returns showed that 35 of their drivers had police records, ranging from a $2 parking violation fine to the serving of a 5-year term for highway robbery. But these police records were kept confidential and not permitted any "blackmailing" use. However, they did permit frank, understanding talks by the personnel director, who was able to aid a number of the drivers, which included several of the best and most trusted ones, to make "new starts."

M. B. Speir, Jr., of Horton Motor Lines, Charlotte, N. C., defended the

WALKER DYNAMOTIVE
- No Gear Shifting
- Lower Operating Costs
- Greater Fuel Economy
- Reduced Maintenance Costs
- More Efficient Power Transmission
- Start-stop Time Reduced

WALKER VEHICLE COMPANY
DIVISION OF THE YALE & TOWNE MFG. CO.
Manufacturers of Electric and Gas-Electric Trucks
101 WEST 87th STREET, CHICAGO, ILLINOIS

IT PAYS TO BUY
EDWARDS
QUALITY
SEMI-TRAILERS
EDWARDS IRON WORKS, INC.
SOUTH BEND, INDIANA

Avoid Vapor Lock

An electric fuel pump. Installed close to fuel tank, it pushes fuel to engine, avoiding vapor lock. Thoroughly reliable. Applicable to any gasoline-driven vehicle. Will not flood.

KING-SEELEY CORPORATION
ANN ARBOR, MICH.

KS FUEL PUMP

DOUBLE SAFETY | POSITIVE TRACTION | DOUBLE MILEAGE

McKay Multi-Grip Double-Bar-Reinforced Truck Chains

THE McKAY COMPANY
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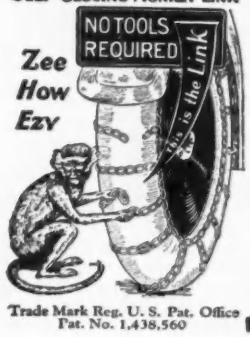

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"trailing" of their drivers, in his topic "Supervision of Drivers Away from the Home Terminals." The company has equipped several light trucks for the highway patrol of their 400 trucks operating on routes from New York City south to the Gulf. These patrol operators aid and train company drivers, and promptly visit the scenes of all accidents or road failures. The patrol cars are made conspicuous in appearance, and part of their service is to render first-aid assistance to the motoring public. Toward the same end, many of their drivers have received Red Cross training in first-aid. The program is coordinated through the centralization at Mr. Spier's desk of the departments of insurance, safety, and personnel. All drivers carry "courtesy cards" which witnesses of accidents usually are very willing to fill out.

Bid for Better Brakes

The final session of the convention, on "The Vehicle—a Panel Discussion," gave first consideration to the problem of getting more efficient brakes, the discussion being lead by Jim Hayden, fleet engineer of the National Safety Council.

E. W. Turley, director of maintenance of Olson Transportation Company, Green Bay, Wis., thought some manufacturers were making a mistake in permitting the sale of trucks inadequately equipped with brakes. For instance, he recently examined a tractor designed for a 40,000-pound load—"equipped with 2½-in. brakes and the lining as hard as a rock." He also thought manufacturers should give more attention to the extension of brakes to the wheels of extra-axle trucks and trailers; and more attention to the better coordination of tractor and trailer brakes. He mentioned that his own company had equipped their heavy road jobs, which average 6000 miles a month and carry 40,000 lbs. gross, with brakes on front and rear wheels and trailers, and had so trained their drivers that they were able to keep on schedule last winter during a stormy period when the trains didn't reach Green Bay for three days. His company had demonstrated that their heavy tractor-trailer outfit could be more efficiently handled by actuating the trailers' brakes first, which prevented jack-knifing and gave better control on icy roads.

F. B. Lautzenhiser, transportation engineer of International Harvester Co., Chicago, agreed that many trucking outfits are inadequately braked, but charged that this was contrary to recommendations of all recognized manufacturers, anxious, of course, that their respective equip-

(Turn to Page 91, Please)

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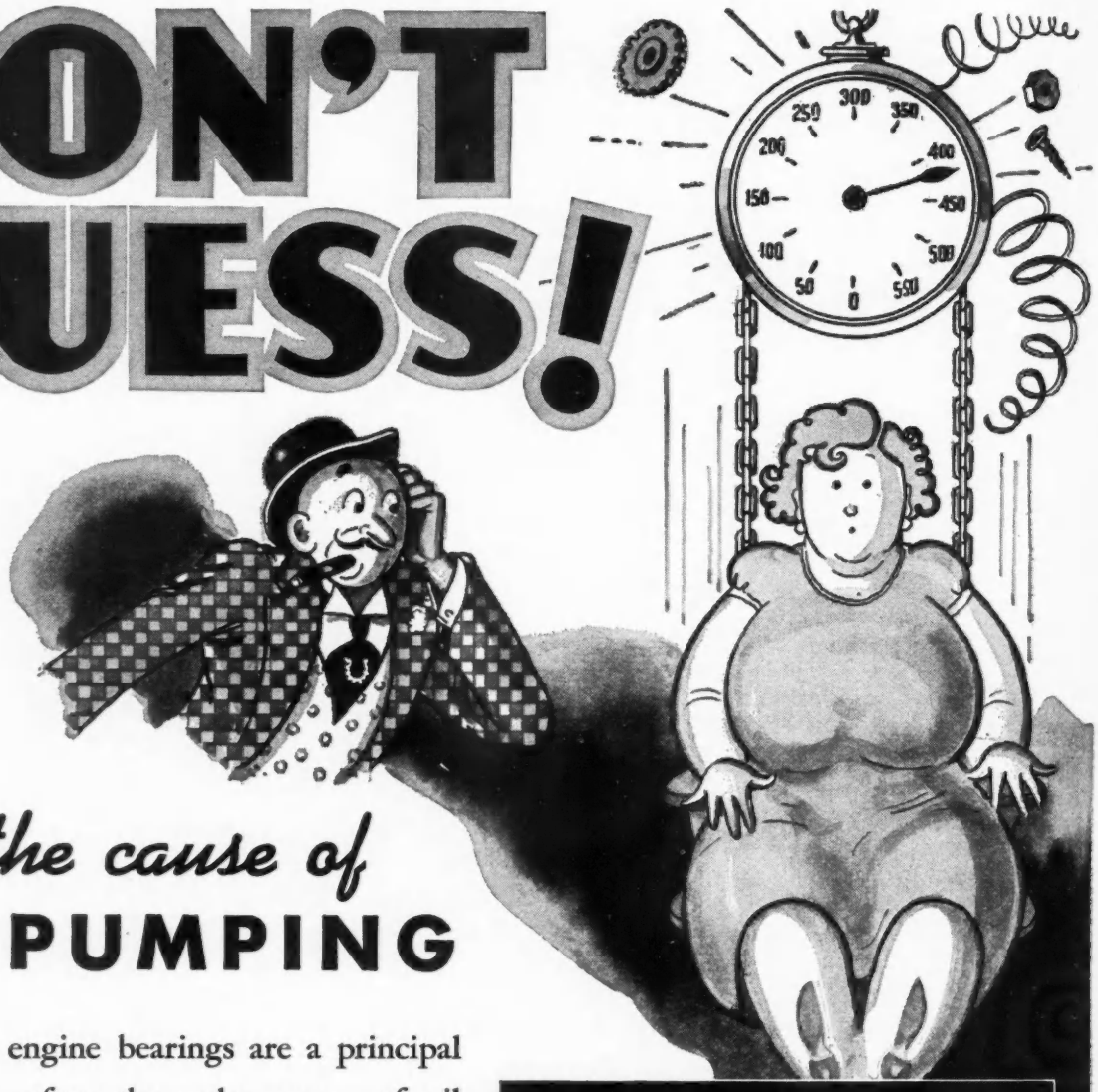

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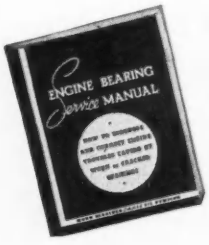

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(CONTINUED FROM PAGE 87)

ment should show good performance records. Thus, there must be dealers or salesmen whose excessive business zeal is stimulating them to sell equipment with inadequate accessories. In response to a question, Mr. Lautzenhiser mentioned as one of the most important vehicle problems, the proper location for load balance of the "fifth wheel" of a truck-trailer outfit. He said the problem was made more difficult when the truck had a short wheelbase.

J. W. Lord, safety engineer of Atlantic Refining Co., Philadelphia, stated that a tractor dealer or salesman couldn't be very much blamed for selling the kinds of equipment that an operator demanded; and that it was up to the operator to know, through his own cost records and information from reliable manufacturers, what kind of brakes he needed. He thought, however, that manufacturers should give more attention to making tractor brakes with more precise pressure response, such as in most passenger cars. Some of the newer brake valves on trucks, he admitted, were operating much more efficiently than older ones; and he agreed that most manufacturers could and would supply the kind of accessory improvements that the operators were willing to pay for.

A. W. Meinke, engineer of Marsh & McLennan, New York City, thought there should be improvements in brakes operated on the ratchet principle, since the ratchet notches were not always properly distributed for the best control of the vehicle and had a tendency to freeze, representing an accident hazard.

W. S. Lawrence, director of safety and public relations of U. S. Trucking Lines, Cleveland, thought the biggest present need in the trucking in-

(TURN TO PAGE 92, PLEASE)

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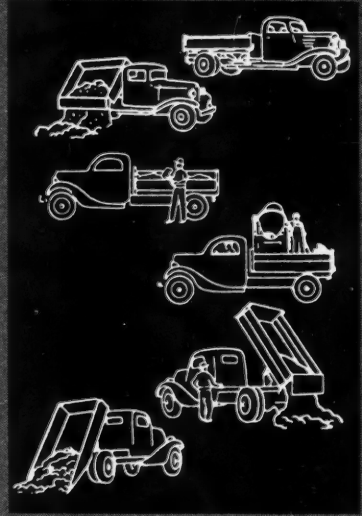

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(CONTINUED FROM PAGE 91)

dustry was more favorable and coordinated legislation. But in the automotive engineering field he thought there should be more of the kind of standardization achieved by such industries as plumbing and building supplies. He also criticised the distribution branch of the petroleum industry through an increasing tendency at highway filling stations to install flood lights so directed as to create a "blind spot" for the approaching motorist, which was an added serious hazard to pedestrians.

These remarks on standardization brought response from Fred Faulkner, automotive engineer of Armour & Co., Chicago, who explained that the S.A.E. had been giving attention for years to some of these problems. Even though the manufacturers had much yet to achieve, he thought they were giving greater values today than ever before and that an operator usually could find equipment to fit his needs provided he was willing to pay for its real worth.

E. G. Quesnel, director of safety of Borden Co., New York City, thought manufacturers should give more attention to providing conncetions and outlets for better night and emergency working lights around motor vehicles, and within the bodies of trucks and trailers. This should include outlets for emergency lights, in case of highway failures, to operate direct from the truck batteries.

Dr. A. R. Lauer, of the department of phychology of Iowa State College, thought the rear light on many motor vehicles, including directional lights, were much too small for distinguishment at safe rear distances, considering the modern speed of travel and the fact that numerous states permitted drivers licenses to persons with only 50 per cent normal vision. He also believed drivers transferred to new cab-over-engine trucks needed special training, since there was a tendency for them to give relatively too much attention to near distances and too little to farther distances.

During the sessions 32 medals and many additional certificates were presented to national winners in the various divisions of the annual National Fleet Safety Contest. A demonstration of a "Court of Inquiry on Vehicle Accidents" was staged by T. B. Johnson, manager of delivery division of Marshall Field & Co.,

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Chicago, with company drivers participating. Also, two company drivers who had driven 12 years and 14 years respectively without accidents, were presented with awards.

A Medal for the U. S.

In a luncheon address H. H. Kelly, chief of Section of Safety, I.C.C. Bureau of Motor Carriers, talked on "Truck Safety—At Home and Abroad." He summarized his observations during a recent six-week European trip through England, France, Switzerland, Germany and Holland. He concluded that the United States, through the new I.C.C. safety program, is "trail blazing in motor vehicle safety" among all countries. Also that the United States, with only 1.3 annual deaths per 1,000 registered automobiles, has much the best motor fatality record; as contrasted with rates of 2 for France; 3 for England; 5 for Germany; and 6 for Switzerland. He reported that England permits gross highway weights of 140,000 lbs., and Germany 100,000 lbs., without apparent harm. However, England has much lower maximum speed; but there are no speed limits on the German super-highways.

The newly elected officers of the Commercial Vehicle Section are as follows: general chairman T. B. Johnson, manager, delivery division, Marshall Field & Co., Chicago, first vice-chairman, J. W. Lord, safety engineer, Atlantic Refining Co., Philadelphia; second vice-chairman, Dwight M. McCracken, assistant chief engineer, Liberty Mutual Insurance Co., Boston; third vice-chairman, H. H. Kelly, chief, section of safety, I.C.C. Bureau of Motor Carriers, Washington, D. C.; and secretary, H. J. Jones, director of safety, Automobile Shippers, Inc., Detroit.

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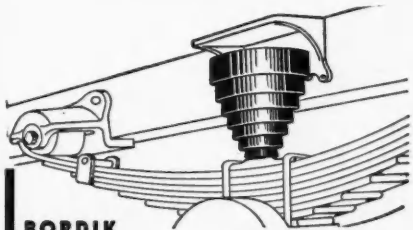
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